OCTOBER 1951

### National Safety News

TO the to the safety

39th NATIONAL SAFETY

CONGRESS and EXPOSITION

OCTOBER 8-12, 1951

CHICAGO

IL WENDLAND

SAFETY EQUIPMENT HEADQUARTERS

SAFETY!

The Man



that means

SERVICE!

### "Everything for Mine and Industrial Safety"

Over 2,600 items of proved equipment, developed through the ever continuing Program in the M.S.A. Research Laboratory, are ready and waiting to help you combat the diversified hazards of today . . . and tomorrow. And this list is constantly growing.

To help you in the selection and application of this safety equipment to meet your individual needs is your M.S.A. Engineer. He is safety-trained. His knowledge, gained through years of experience and study, is at your service. And you'll find this service waiting for you in most of the key cities throughout the United States and Canada. Call the M.S.A. man on your every safety problem . . . his job is to help you.

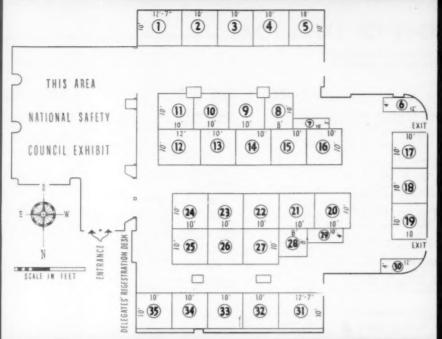
"M.S.A." means a single source of supply, one undivided responsibility, and a standard of quality that is certified by successful service.

#### MINE SAFETY APPLIANCES COMPANY

BRADDOCK, THOMAS AND MEADE STREETS . PITTSBURGH 8, PA.

At Your Service

54 Branch Offices in the United States and Canada



# Casino Room-CONGRESS HOTEL

### OFFICIAL EXPOSITION GUIDE

39TH
NATIONAL
SAFETY
CONGRESS
AND
EXPOSITION

Exhibition Fall-STEVENS HOTEL

1 1 (15) 14 11 (12) 29 1 30 (18) 31 9 1 32 1 n (8) H (3) (3) 4 1 1 NATIONAL SELETY

Chicago OCTOBER 8-12, 1951

C — Casino Room, Congress Hotel S — Exhibition Hall, Stevens Hotel

NAME	BOOTH NUMBER	PAGE NUMBER	NAME	BOOTH NUMBER	PAGE NUMBER
ACME PROTECTION EQUIPMENT CO. 1037 W. Lake St., Chicago 12, III. Representatives: G. M. Glidden, Robert A. Flood, N. C. Tamandl. Manufacturers—Gas Masks Exclusively.	71-5	190	AMPCO METAL, INC. 1745 S. Thirty-Eight St., Milwaukez 4, Wisc. Representatives: Stuart C. Lawson, F. H. Opitz, Donald Treleven. Manufacturers and Distributors — Safety Tools Fabricated from Ampco Metal, Ampco Beryllium-Copper and Monel.	10-5	149
ADVANCE GLOVE MFG. CO. 901 W. Lafayette Blvd., Detroit 26, Mich. Representatives: Chas. E. Harris, H. Ro- senberg, Fred J. Weber. Manufacturers—All Types of Work Gloves, Safety Gloves and Leather Safety Clothing.	4-C	173	ANSUL CHEMICAL CO. FIRE EXTINGUISHER DIVN. Marinette, Wisc. Representatives: K. B. Covert, R. A. Scheldt, R. E. Sexmith, William Paulsen, Jack R. West.	92-93-S	136
AETNA LIFE AFFILIATED COMPANIES 151 Farmington Ave., Hartford 15, Conn. Representatives: Paul B. Cullen, Ernest G.	102-103 104-S	128	Manufacturers and Distributors—Ansul Dry Chemical Fire Extinguishing Equipment.		
Eppler.  Safety and Health Services for Employees, Both On and Off the Job.			ARCADIA MFG. CO. 1081 S. Eton Road, Birmingham, Mich. Representatives: Draper Allen, J. Allen Bumpus, John D. Cowan.	42-S	
ALAN WOOD STEEL CO. Conshohocken, Ps.	119-S	161	Manufacturers—Plastic Coated Gloves and Aprons for Industry.		
Representatives: Charles D. Dorworth, Walter L. Jones, Jr., Leon J. Lieberman. Manufacturers—Abrasive Rolled Steel Floor Plate.			BASHLIN, W. M., CO. Bashlin Bldg., Grove City, Pa. Representatives: Al Schell, Don Elliott, Don Christley.	5 6-S	64
ALL AMERICAN SAFETY EQUIPMENT CO.  11 S. La Salle St., Chicago 3, III.  Representatives: William B. Rainville, C.	31-C	204	Manufacturers—Linemen's Safety Equip- ment.		
M. Rainville.  Manufacturers and Distributors—Power Press Guards; Safety Engineering Surveys; Consultations.			BAUSCH & LOMB OPTICAL CO. 635 St. Paul St., Rochester 2, N. Y. Representatives: Fred J. Koeth, R. A. Sher- man, Russell E. Craytor, Ray Reed, George Houseworth, Paul R. Maier.	51 52- 53-S	54-86
AMERICAN ABRASIVE METALS CO. 460 Coit St., Irvington 11, N. J. Representatives: Elmer A. Sell, T. M. Libney, Gus Swoboda.	114-S	44	Manufacturers—Safety Glasses and Safety Eyewear for Every Occupational Require- ment.		
Manufacturers and Distributors—Abras ve. Metals, Paints, Coatings, Non-Skid Grating for Safe Walkways.			BEST, ALFRED M., CO., INC. 75 Fulton Sc., New York 7, N. Y. Representatives: Harry Armand, Payson H. Ryan, Frank Matre. Publishers—Safery Maintenance, and Pro-	38 S	_
AMERICAN CHAIN & CABLE CO., INC. Bridgeport 2, Conn.	2-3-4-S	132-147	Publishers—Safety Maintenance and Pro- duction; Best's Safety and Maintenance Directory.		
Representatives: N. J. Gebert, H. M. Wil- aon, G. A. Faerber, E. J. Flood, W. B. Phillips, H. T. Georga, J. E. Maxwell, C. S. Stewart, C. H. Marschall, W. A. Shay. Manufacturers—Chains, Cable and Wire Rope of Various Kinds and Sizes; Steel and Malleable Castings; Brakes and Brake			BRADLEY WASHFOUNTAIN CO. 2203 W. Michigan St., Milwaukee 1, Wisc. Representatives: Charles H. Beremer, Ralph Struck, Sid Lasley, Porter West, Hill Skoglund. Manufacturers—Group Washing Equipment.	32-33-S	77
and Malleable Castings; Brakes and Brake Controls; Cranes, Hoists, Valves and Fit- tings.			BRADY, W. H., CO.	26-S	198-205
AMERICAN-LAFRANCE-FOAMITE CORP.	116-117-8	37	Representatives: W. H. Brady, Jr., W. J. Tuite, W. E. Schneider. Manufacturers—Self-Sticking Safety Sign: Pipe Markers and Special Markers and		
Representatives: H. M. Messenger, Charles Cizek, G. J. Halpin, C. E. Vescelus, C. W. Weilert, E. W. Hill.			Signs.		
Manufacturers—Fire Protection and Fire Fighting Equipment,			BRECK, JOHN H., INC. 115 Dwight St., Springfield 3, Mass. Representative: Lester L. Brossard.	153-S	60
AMERICAN OPTICAL CO. Southbridge, Mass. Representatives: Charles H. Gallaway.	79-80- 81-S	26-27-BC	Manufacturing Chemists—Industrial Hand Cleaner; Hair and Scalp Preparations.		
Representatives: Charles H. Gallaway, Thomas P. Welch, John T. Monahan, T. A. Waish, Carl H. Jacobson, C. A. Parrenheimer, Charles C. Albrecht, R. M. Edmister, Charles Casey, T. Edwister, C. M. Cook, A. R. Barrington, T. H. Hayden, A. W. Alberling, J. F. McKenna, J. J. Hoffmann, F. J. Donlea, J. C. Rademacher, A. W. Nero,			BROWNE, STEWART R., MPG, CO. 258 Broadway, New York, N. Y. Representatives: Stewart R. Browne, Sr., Stewart R. Browne, Jr., Robert E. Blon- quist, Roy L. Freese, Harry Douglass, Manufacturers—Electrical Safety Equipment, Flashlights, Explosive Proof and Vapor- Proof Extension Lights.	151-152-S	-
ling, J. F. McKenna, J. J. Hoffmann, F. J. Donlea, B. McKenna, J. J. Hoffmann, F. J. Donlea, B. McKenna, J. J. Hoffmann, F. J. Donlea, B. W. McConne, W. Nero, Son, E. Voight, W. R. Lofaren, H. J. Brammeier, J. C. Brownlee, A. A. Fuhr, man, E. Leonard, R. J. Waldow, R. C. Nickum, G. L. Cochrane, N. E. Seastrom, Manufacturers—Head, Eye and Respiratory Protective Devices, Safety Clothing and Safety Specialty Products.			BUHRKE, R. H., CO. 4701 W. Grand Ave., Chicago 39, III. Representatives: Herbert A. Raschke, C. G. Dittman, Harold C. Christiansen, Ray Herod, William S. Sherertz. Manufacturers—Safety Equipment for Con- struction and Maintenance.	110-111-S	79

THE NATIONAL SAFETY NEWS is published monthly by the National Safety Council, 425 N. Michigan Ave., Chicago, Ill. Yearly subscription price to members, \$5.50; to non-members, \$7.50. Volume 64, No. 4. Entered as second class matter June 1, 1921, at the Post Office at Chicago, Illinois, under the Act of March 3, 1879.

Open Daily 8:30 to 5:30-Closes Friday 10:00 a.m.

C — Casino Room, Congress Hatel S — Exhibition Hall, Stevens Hotel

NAME	NUMBER	PAGE NUMBER	NAME	NUMBER	NUMBE
BULLARD, E. D., CO. 275 Eight St., San Francisco, Calif.	128-S	53	DETEX WATCHCLOCK CORP. 75 Varick St., New York, N. Y.	32-C	78
Representatives: E. W. Bullard, Alpheus			Representatives: H. E. Napier, Arthur F. Gmitro, George Brawand.		
Bull, E. W. Bullard, Jr.  Manufacturers and Distributors—Personal Safety Devices for Industry.			Gmitro, George Brawand.  Manufacturers — Watchmen's Clocks and Accessories.		
CANFIELD OIL COMPANY 3216 E. 55th St., Cleveland 27, Ohio	29-C	148	DIAMOND MATCH CO. 125 Paridon St., Springfield 1, Mass.	16-C	58
Representative: Fred Beutel. Manufacturers—Oil Absorbents.			Representatives: K. M. Ness, J. P. Mc- Carihy, J. D. Schroeder. Manufacturers—Book Matches for Safety		
CHANCE, A. B., CO. 210 N. Allen St., Centralia, Mo.	7-S	-	Advertising and Sales Promotion Cam- paigns.		
Representatives: O. G. Anderson, D. C. Hubbard, R. S. Ferguson, M. R. Parkin, J. C. Blanton.			DIVERSEY CORP. 1820 Roscoe St., Chicago 13, Ill.	112-113-S	162
Manufacturers and Distributors—Transmis- sion and Distribution Equipment.			Representatives: Brooks Powers, L. A. Saylor, J. P. Molis, E. Dussault, F. J. Buresh, K. A. Fisher, P. L. Peterson, E. C. Robson, Harold Holmes, M. Cadwailader, M. R. Young, R. J. Coil, R. H.		
CHEMICAL SERVICE OF BALTIMORE Howard & West Sts., Baltimore 30, Md.	2-C	61	wupper,		
Representatives: Bernard R. Freudenthal, John Eisenhart, Hans J. Heckmann. Manufacturers.—Waxes, Soaps, Cleaners, Disinfectants and Chemical Specialites.			Manufacturers — Industrial Maintenance and Cleaning Chemicals.		
Disinfectants and Chemical Specialties.  CHEMICAL SPECIALTIES, INC.			DOCKSON CORP. 3839 Wabash Ave., Detroit 8, Mich.	140-S	49
4 Waltham Ave., Springfield 5, Mass. Representatives: B. H. Gardner, Clarence E.	11-C	79	Representatives: Harold E. Piggott, E. N. Luckey, Joe Gray, J. R. Thompson. Manufacturers — Goggles, Face Shields, Welders Helmets, Respirators.		
Manufacturers—Industrial Hand Creams and Cleansers.			DOW CORNING CORP. Midland, Mich.	23.C	74
CHICAGO EYE SHIELD CO. 300 Warren Blvd., Chicago 12, III.	72 73	1 B.C.	Representatives: George Mars, Charles Hawkins, John Apergis.	274	74
Representatives: Robert Malcom, Jr., Fred Guilbert, Fred La Force, Wayne Maxwell, Rudy Westerberg, Emmett O'Connell, John Eder, Jr.	74-S		Manufacturers—Cleaning Stations for D's- pensing Silicone Treated Sight Saver Tis- sues.		
Manufacturers—Head and Eye Protective Equipment.			DUNN PRODUCTS 1214 W. Madison St., Chicage 7, III.	23-S	175
COLUMBUS GLOVE MFG. CO. 1836 E. Fulton St., Columbus 9, Ohio	146-147-S	-	Representatives: Bernie McGawley, H. A. Stroberg, C. R. Olson. Manufacturers and Distributors—Protective		
Representatives: A. T. Francis, C. A. Si- monson, W. E. Brantner. Manufacturers—Coated Gloves and Aprons.			Clothing for Industrial Workers Made from Asbestos, Leather, Rubber, Neoprene and Fire-Proofed Duck.		
COLUMBUS MCKINNON CHAIN CORP.	69-S	51	DUO-SAFETY LADDER CORP. 811 Ninth St., Oshkosh, Wisc.	124-125-S	_
Representatives: Gerald F. Grace, F. T. Benjamin, M. C. Hendershott, Tom H. Mulry.			Representatives: Edmund J. Arps. Erwin H. Schwab, Brooks J. Goodin, Dorothy Schoenberger, Harvey Walters.		
Manufacturers-Herc-Alloy Sling Chains.			Manufacturers—Safety Ladders, Fire Ladders, Ladder Shoes.		
O.TWO FIRE EQUIPMENT CO. 60 Belmont Ave., Newark 1, N. J.	126-S	11	EAGLE-PICHER SALES CO. 500 American Bidg., Cincinnati 1, Ohio	43-S	142
Representatives: Maynard A. Laswell, Har- old J. Burke, Donald A. Diehl, Frank F. Jaeger.			Representatives: Robert L. Shirley, H. D. Noll, C. B. Wahl. Producers—Eagle-Picher Industrial Floor-		
Manufacturers—Carbon Dioxide and Dry Chemical Extinguishers, Systems, Smoke Detectors.			Producers—Eagle-Picher Industrial Floor- Dry 285. A heavy duty, anti-skid, light reflecting absorbent for plant safety and maintenance.		
UNNINGHAM, M. E. CO. 15 E. Carson St., Pittsburgh 19, Pa.	46-S	76	EDMONT MFG. CO. Coshocton, Ohio	25-S	_
Representatives: F. S. Speicher, Sr., Walter J. Speicher, Charles O. Klousnitzer.  Manufacturers—Safety Marking Tools.			Representatives: Will Martin, Thomas Stanton, Max A. Williams. Manufacturers — Coated Fabric Work Gloves.		
DAVIS EMERGENCY EQUIPMENT CO., NC.			ELLIOTT SERVICE CO., INC. 30 N. MacQuesten Parkway, Mt. Vernon, N. Y.	24-S	_
5 Halleck St., Newark 4, N. J. Representatives: F. Rutledge Davis F. P.	75-76-S	59	Representatives: A. N. Gale, Charles G. Frisbie, H. L. Neilson, John S. Milton,		
Representatives: F. Rutledge Davis, F. R. Davis, Jr., S. F. Bliss, J. F. Coonan, John Martin.  Manufacturers — Respiratory Protection, Combustible Gas Indicators, General Safe-			Frisbie, H. L. Neilson, John S. Milton, Wayne D. Jewell, Armand E. Dodge, P. C. Collins, Roy C. Omer, J. R. Lancaster. Publishers—Accident Prevention Displays; Safety Conference Programs; Supervisor's Bulletin; Bulletin Boards.		

C — Casino Room, Congress Hotel S — Exhibition Hall, Stevens Hotel

NAME	BOOTH NUMBER	PAGE NUMBER	NAME	NUMBER	PAGE NUMBER
EMBOSOGRAF CORP. OF AMERICA 38 W. 21st St., New York 10, N. Y	13-C	-	INDUSTRIAL GLOVES CO. 700 Garfield St., Danville, III.  Representatives: I. W. Millard, Jess A. Brewer, John R. Redenbaugh, D. F. Didier, B. J. Fullen, J. C. Finegan.  Manufacturers — Finger Guards, Supergards, Wovengards, Handguards, Gloves, Mittens, Arm Protectors, Protective Apparel, Leggings.	16-17-S	66
EMERSON, J. H., CO. 22 Cottage Park Ave., Cambridge 40, Mass Representatives: John H. Emerson, David	49-S	78			
Representatives: John H. Emerson, David L. Garrison, Paul Gebhard. Manufacturers—Resuscitators and Other Emergency Breathing Equipment.			INSTO-GAS CORP. 1977 E. Woodbridge Avs., Detroit 7, Mich Representatives: A. L. Wiener, V. J. Ve- lander, John L. Marley. Manufacturers—Underwriters' and Factory	9-S	-
FAIRFIELD GLOVE CO. Fairfield, Iowa  Representatives: John Hunt, James F. Lamson, Blaine Kerr.	35-C	-	Mutual Approved Torrhes and Furnaces.		
Lamson, Blaine Kerr.  Manufacturers — Industrial Gloves and Mittens.			INTOXIMETER ASSN. 334 Buffalo Ave., Niagara Falls, N. Y.  Representatives: Glenn C. Forrester, Grizel C. Forrester.	6-C	-
FENDALL CO. 4631 N. Western Ave., Chicago 25, III. Representatives: John N. Liautaud, Philip I. Liautaud.	33-C	72	Manufacturers—Sales and Service of Equipment to Determine Degree of Al- coholic Influence.		
Manufacturers—Head and Eye Protection Equipment.			IRON AGE DIVN., H. CHILDS & CO., INC. 813 Penn Ave., Pittsburgh 22, Pa	50-\$	47
FINNELL SYSTEM, INC. 300 Bast St., Elkhart, Ind.  Representatives: James E. Bates, R. M. Harter, Vernon Leonard, Alvin R. Uthe, Oliver A. Minard.  Manufacturers—Floor Maintenance Ma-	63-64-S	57	Representatives: James H. Childs, Jr., Robert H. Lohr, Charles E. Goffe, Andrew May, Harrey Childs, Jr., D. C. Mac- Naughton. Manufacturers—Complete Line Leather and Rubber Industrial Safety Footwear for Men and Women.		
FRANKLIN RESEARCH CO.			JUNKIN SAFETY APPLIANCE CO. 101 S. Floyd St., Louisville 1, Ky.	136-S 1	86-204-212
5134 Lancaster Ave., Philadelphia, Pa.  Representatives: Charles B. Masseth, Jr., D. Sim, V. Bushmiller.  Manufacturers—Anti-Slip Floor Maintemance Materials.	143-S	168	Representative: John I. Junkin. Manufacturers—Junkin Interlocking Bar- rier Guard; Swinging Die Closure; Elec- tro-Lock Shield and Splint Type Stretcher.		
GRO-CORD RUBBER CO. 807 W. Jackson St., Lime, Ohio			JUSTRITE MFG. CO. 2061 N. Southport Ave., Chicago 14, Ill.	18-S	64
Representatives: B. H. MacLeod, D. J. Wriggelsworth, K. F. Trimble. Manufacturers—Gro-Cord, Raw-Cord and Neo-Cord Soles, Heels and Taps.	120·S	52	Representatives: John E. Stark, Jr., War- ren Mitchler, Frank O. White. Manufacturers-Safety Cans, Oily Waste Cans, Safety Electric Linterns, Flashlights and Fire Estinguishers.		
HILD FLOOR MACHINE CO. 740 W. Washington Blvd., Chicago 6, III	130-S	70	KAREL FIRST AID SUPPLY CO. 4342 Ogden Ave., Chicago 23, III.  Representatives: Louis X. Karel, James S. Karel, Fred T. Mukensnable.	82-S	-
Myers, Jim Connell.  Manufacturers—Floor Cleaning and Maintenance Equipment and Supplies.			Karel, Fred T. Mukensnable.  Distributors—Industrial Hospital Supplies and Equipment. Drugs, Dressings, Furniture, Instruments.		
HILLYARD CHEMICAL CO. 402 N. Third St., St. Joseph 1, Mo. Representatives: Elliott C. Soratt. William	22-S	67	KEARNEY, JAMES R., CORP. 4236 Clayton St., St. Louis 10, Mo.	31-S	_
Representatives: Elliott C. Spratt, William E. Hallyard, J. J. Gafford, Sr. Manufacturers—Floor Treatments, Build- ing Maintenance, Sanitation Products, Equipment and Materials.			Representatives: L. L. Crump, A. R. Lan- dis, Ralph Mudd. Manufacturers—Line Tools for Linemen in Handling Energized Wires.		
HORNER & ROBERTSON, INC. 1340 Umatilla St., Denver 4, Colo.	7-C	-	KEYSTONE VIEW CO. Meadville, Pa.	150-S	80
Representatives: H. H. Wallower, Jr., Frank L. Wamsley. Manufacturers—Rolon Tire Chains.			Representatives: Walter Burkhardt, Victor A. Lennon, W. G. Davis. Manufacturers—Original Binocular Visual Screening Tests for Industry.		
HY-TEST DIVN., INTERNATIONAL SHOE CO. 1509 Washington Ave., St. Louis 3, Mo.	95-S	22-23	KIDDE, WALTER & CO., INC. 675 Main St., Belleville 9, N. J.		
Representatives: Norman C. Whitsett, Edward B. Lang, James J. Kelley, Fred G. Seymour, Mark Constantine, Frank M. Webb, J. W. Hyde, H. D. Scott. Manufacturers—Hy-Test Anchor Flange Steel Toe Safety Shoes.			675 Main St., Belleville 9, N. J.  Representatives: W. E. Morgan, M. H. Arnold, W. R. Elder, W. A. MacFadden, W. E. Healey.  Manufacturers—Fire Protection and Ex- tinguishing Equipment.	109·S	135
	1 10	5.30	tinguishing Equipment. Closes Friday 10:00	o m	

C — Casina Roam, Cangress Hotel S — Exhibition Hall, Stevens Hotel

NAME	BOOTH NUMBER	PAGE NUMBER	NAME	BOOTH NUMBER	PAGE NUMBE
KIMBALL SAFETY PRODUCTS CO. 9310 Wade Park Ave., Cleveland 6, Ohio Representatives: Don Kimball, O. E. Kimball, William Mahon, Manufacturers and Distributors—Goggles, Gloves, Safety Clothing and Other Safety Equipment.	96-5	48	MAGNAFLUX CORP. 5900 Northwest Highway, Chicago 31, III.  Representatives: Denis P. Walsh, Thomas D. Stevens, Roy O. Schiebel, Jr., Arthur R. Lindgren, Jr., William A. Cannon, G. F. Newburg.  Manufacturers—Magnaflux Equipment for Maintenance, Safety and General Inspec-	10-14-C	-
KLEIN, MATHIAS, & SONS 3200 Belmont Ave., Chicago 18, III	65-66-S	76	Maintenance, Safety and General Inspec-		
Representatives: Mathias A. Klein, Mathias A. Klein, Jr., H. B. Wilson, Jr., W. J. McAmis, B. E. Rogers, A. L. Moore.  Manufacturers — Linemen's Tools and Equipment.			MARSH & McLENNAN, INC. 231 S. La Salle St., Chicago 4, Ill.  Representatives: R. W. Hutchinson, L. A. Foschinbaur, Ralph Crosby, K. E. Reed, F. H. Harrison	134-135-S	
LEGGE, WALTER G., CO., INC. 101 Park Ave., New York 17, N. Y	36-37-S	65	Insurance Brokers and Agencies.		
Representatives: Walter G. Legge, J. Paul Glenn, George A. Arnold, John E. Hen- nessy, Ray F. Bender, R. F. McConville, John E. McLaughlin, Kenneth Zimmer- man, K. Edward Tenny, Chalmer D. Glose, Hai C. Feazier, Albert J. Steiner. Manufacturers—Safery Floor Polishes, Con- ductive Floor Coating, Static Grounding Device for Personnel.			MARTINDALE ELECTRIC CO. 1375 Hird Ave., Lakewood, Cleveland 7, Ohie Representatives: Roy Blersch, Florence Blersch, Joe Rick. Manufacturers — Protective Dust Mask, Electric Testing and Indicating Instruments.  MASURY-YOUNG CO.	44-S	-
			76 Roland St., Boston, Mass	20-21-C	42
LEHIGH SAFETY SHOE CO. Race and Court Sea, Allentown, Pa. Representatives: F. B. Griswold, John E. Ellis, Arnold F. Warner, Lawrence F. Connolly, Paul E. Masters. Manufacturers—Leather Safety Box Toe Shoes and Rubber Boots.	87-5	30-31	Representatives: Donald M. King, Ernest V. Harch, P. C. Archer, Robert D. Lane, Stanley E. Kredler.  Manufacturers — Safety Floor Treatment and Maintenance Materials.  MAN, THOM, SAFETY SHOE DAYN		
LIGHTFOOT SCHULTZ CO.	40.0		McAN, THOM, SAFETY SHOE DIVN, MELVILLE SHOE CORP. 25 W. 43rd St., New York 18, N. Y.	118-5	43
663 Fifth Ave., New York 22, N. Y.  Representatives: William E. Pemberton, J. D. Compton, O. O. Baddeley.  Manufacturers—Granulated Skin Cleansers, Lotion, Bar Soap and Dispensers.	47-\$	_	Representatives: William J. Smith, M. K. Allyn, Carl Dowell, Martin Gates, Edward Spatial, Jack Speer, Water Schember, Marchall Speer, Peter Goldschmeding John Yudt. Manufacturer, and Distributors. Thom		
LINCOLN-SCHLUETER FLOOR MACHINERY CO. 1250 W. Van Buren St., Chicago 7, Ill.			Manufacturers and Distributors Thom McAn Safety Shoes.		
Representatives: R. T. Stelmore, C. R. Flaks, L. C. Johnson.  Manufacturers—Industrial Vacuum Machines, Floor Scrubbers and Polishers, Scarifiers and Auto-Scrubbers.	18-C	_	McDERMOTT, JULIAN A., CORP. 40-22 National St., Corona, L. I., N. Y. Representatives: J. A. McDermott, Harry Davis, Jr., Robert G. Fleming. Manufacturers — Warming, Work. Safety Lighting for Industrial, Utility Aviation	60-3	-
LOGAN MFG. CO. 721 E. Broadway, Glendale, Calif.	1-C	-			
Representative: Hugh H. Logan. Manufacturers—Emergency Showers, Indus- trial Shower Room Equipment.			McDONALD, B. F., CO. 5721 W. 96th St., Les Angeles 45, Calif Representatives: B. F. McDonald, Stan Tolley, Marion Brown, Ed Stanzel, J. J.	61-62-S	24-25
LOUISVILLE METAL PRODUCTS CO., INC. 1101 W. Oak St., Louisville 10, Ky.	22-C	73	Delahide.  Manufacturers and Distributors—Industrial Safety Appliances and Clothing.		
F. Myers, Walter Rose.  Manufacturers — Aluminum Ladder and Scaffolding Products.			MEDICAL SUPPLY CO. 1027 W. State St., Rockford, III.	137-138-S	143
LUTHER MFG. CO., INC. 126 E. Sullivan St., Olean, N. Y.	5-C	-	Representatives: Gordon P. St. Clair, Gordon C. Nelson, A. F. Johnson, James A. Chapin, Roland R. Clark.		
Representatives: James H. Luther, George Anderson, McKnley L. Phillips. Manufacturers—Power Press Guards.			Manufacturers and Distributors—MSCo Flexible Unit First Aid.		
MACWHYTE COMPANY 2902 Fourteenth St., Kenosha, Wisc. Representatives: F. J. Nelson, G. W.	78-S	32-33	METROPOLITAN LIFE INSURANCE CO.  1 Madison Ave., New York 10, N. Y.  Representatives: Thomas J. Berk, Edward R. Seese, Edmund J. Semple.	139-S	
Drysdale, E. F. Garris.  Manufacturers—Wire Rope and Braided Wire Rope Slings, Fittings and Cable Assemblies.			Educational Publications and Materials Dealing With Safety.		
			MILBURN CO. 3246 E. Woodbridge, Detroit 7, Mich	59-S	_
MAGLINE, INC. Pinconning, Mich. Representatives: D. C. Law, R. V. Miller, F. A. Reger. Manufacturers—Magnesium Safety and Ma-	19-C	200	Representatives: J. A. Stifter, Mrs. M. D. Leach, George Cole.  Manufacturers—Ply Protective Creams, Ply Garb Plastic Clothing, Ply Glovs, Plastic Work Gloves.		
terials Handling Equipment.			Work Gloves. Closes Friday 10:00		

C — Casino Room, Congress Hotel S — Exhibition Hall, Stevens Hotel

NAME	BOOTH NUMBER	PAGE NUMBER	NAME	BOOTH NUMBER	PAGE NUMBER
MILLER EQUIPMENT CO., INC. 13th and New Sts., Franklin, Pa. Representatives: R. J. Miller, C. A. Besterman, J. C. Nelms, Jr., E. C. Shawgo. Manufacturers — Linemen's and Industrial Safety Belts.	144-145-S	71	POSITIVE SAFETY MFG. CO. 4408 Perkins Ava., Cleveland 3, Ohio Representatives: E. U. Whitacre, P. N. Shaw, Eliza Reed. Manufacturers—Power Press Guards.	41-S	193
MINE SAFETY APPLIANCES CO. B.addock, Thomas and Meede Sts., Pitsburgh, Pa.  Representatives: George H. Deike, J. T. Ryan, Jr., J. B. Davies, C. M. Donahue, F. A. King, J. W. McCrackin, G. W. Lascher, H. N. Gruber, H. W. Richards, H. J. Segrave, C. H. Mehaffev, C. R. Dever, C. H. Sanderson, E. W. Merry, B. W. Catalane, E. M. White, J. S. Moore, H. R. John Miller, K. W. Hanlon, W. E. Cofer, Jr., H. N. Trice, R. A. Pohl, Cofer, Jr., H. N. Trice, R. A. Pohl, Manufarturer.	83-84- 85-86-S	LF.C35	PROTECTOSEAL CO. 1920 S. Western Ave., Chicago 8, Ill. Representatives: William E. Belt, Joseph J. McGinnis, David P. Anschicks, Gerald I. McCarty, Charles R. Peck, R. Harper Folckemer. Manufacturers—Safety Cans, Oily Waste Cans, Flame Arrester, Devices for Flammable Liquids.	105-106-S	69
Every Industry.			PULMOSAN SAFETY EQUIPMENT CORP. 644 Pacific St., Brooklyn 17, N. Y. Representatives: Larry Foley, Carrington Cabell, Floy Jennings. Manufacturers—Industrial Safety Equip- ment.	20-S	74
MJLTI-CLEAN PRODUCTS, INC. 2277 Ford Parkway, St. Paul 1, Minn. Representatives: N. H. McRae, E. V. Coul- ter, E. C. Hesli, Dan McNeelv. Manufacturers—Floor Maintenance Equip- ment and Materials.	25-26-C	63	PYRENE MFG. CO. 560 Belmont Ave., Newark 8, N. J. Representatives: Martin R. Ayers, F. R. Kachel, S. C. Williams, Jr. Manufacturers—Fire Protection Equipment.	127-S	-
NATIONAL SAFETY COUNCIL 425 N. Michigan Ave., Chicago 11, III. Representatives: Ruth Park, W. G. Johnson, D. A. Pickerell, H. W. Champlin, Lois Zearing, Ruth Nielander, Derathy Heinz.	155-S 1 Congress Hotel	80-181-182 ss	RACINE GLOVE CO., INC. Box 202, Rto, Wisc.  Representatives: O. Reed Bigelow, Frederick P. Otticg, William S. "herertz. Manufacturers—Gloves, Apparel, Protective Equipment, Leather, Asbestos and Steel Reinforced.	30-C	-
OCCUPATIONAL HAZARDS, INC. 1246 Ontario St., C.eveland 13, Ohio Representatives: Irving B. Heater, Edwin M. Joseph, N. N. Goedman, Jr. Publishers.	68-S	-	RANDOLPH LABORATORIES, INC.  8 E. Kinzie St., Chicago 11, Ill.  Representatives: Donald D. Roberts, Oakley Jenks, Joseph J. Ross, James A. Galligan, Ill, George Kuhlmann, S. L. Langher,	132-133-S	_
OIL-DRI CORP. OF AMERICA 520 N. Michigan Ave., Chicago 11, III, Bepresentatives: Nick Jaffee, A. L. Sword- III, Woodrow A. Jaffee, Sol Jaffee, Paul K. Robertson. Manufacturers—Oil and Grease Absorbents.	148-149-S	81	Manufacturers—Dioxide Fire Extinguishers,  REECE WOODEN SOLE SHOE CO, 15th St, and 41st Ave., Columbus, Neb.  Representatives: Dorothra Recce, Angelene R. Bergman, Gus Bergman	115-S	77
ONOX, INC. 121 Second St., San Francisco, Calif. Representatives: James de Fremery, H. A. Jenssen, Robert de Fremery, L. C. Egner Distributors—Onox Skin Toughener for Athlete's Foot Prevention.	40-S	186	Manufacturers — Recee "Perfect Rocker" Wooden Sole Safety Footwear.  RICH LABORATORIES SALES DIVN., INC. Emigrville, Pa. Representatives: Ernest Rich, Bart Ring, Henry F. Wile.	9-C	203
OSBORN MFG. CORP. Argonine Road, Warsaw, Ind. Representatives: Robert E. Osborn, For- rest D. Mitterling. Manufacturers—Safety Phers and Tongs for Feeding Punch Presses.	34-C	178	Manufacturers—First Aid for Burns.  ROCKWOOD SPRINKLER CO. 38 Harlow St., Worcester 5, Mass.  Representatives: J. J. Ryan, E. P. Hughes, F. E. Toensmeier.  Manufacturers — Nozzles and Industrial	3-C	45
PACKIT COMPANY 175 GREENWICH Ave., Greenwich, Cenn. Representatives: William W Fallon, Cecil R. Brown. Manufacturers—First Aid Equipment.	15-C	62	Manufacturers — Nozzles and Industrial Sprinkler System for Fire Protection; Valves, Unions.  ROSE MFG. CO. 1731 Arapahoe St., Denver 2, Colo. Representatives: Clarence W. Rose, Mrs. C. W. Rose, Jon E. Sharp, Baker W. Armstrong, Mary Id. Urkulil.	45-S	172
PACKWOOD, G. H., MrG, CO. 1545 Tower Grove Ave., S. Louis 10, Mo. Representatives: John W. Relley, H. B. Lamping, Doile A, Lipe. Manufacturers—PAX Safety Industrial Skin Cleansers and Dispensers.	94-S	50	Manufacturers—Industrial Safety Equip- ment.  SAFETY CLOTHING & EQUIPMENT CO. 7016 Euclid Ave., Cleveland 3, Ohio	55-56-S	34
PATENT SCAFFOLDING CO., INC. 1550 Dayton St., Chicago 22, III. Representatives: Nels F. Borgaard, Earl	98-99-S	20-21	Representatives: E. H. Brooks, L. F. Brooks, L. P. Debes, A. A. Hood, J. A. Finegan.  Manufacturers—Safety Clothing and Equipment for Every Type Industrial Worker.		
W. Enthof, Victor Arbor, Arthur Heon, E. K. Klein.  Manufacturer:—Gold Medsal Wood and Magnesium Safety Ladders, Suspended. Sectional Tubular Steel and Alominum Scaffolding, Sidewalk Protection Canopies. Steel Grandstands.			SAFETY FIRST PRODUCTS CORP. 170 Saw Mill River Road, Elmsford, N. Y. Representatives: Martin Fleming. Jere Fleming. Charles E. Noyes. Manufacturers and Distributors — Dry Chemical Fire Equipment.	24-C	75
	to 5	:30-	Closes Friday 10:00	a.m.	

C — Casino Room, Congress Hotel S — Exhibition Hall, Stevens Hotel

NAME	NUMBER	NUMBER	NAME	NUMBER	NUMBEI
SAFETY FIRST SHOE CO. Water St., Holliston, Mass. Representatives: Albert H. Crafts, John E. Flegel, Louis Rubin. Manufacturers—Safety Steel Toe Shoes for Mea.	57-S	-	STEPHENSON CORP. 362 Broad St., Red Bank, N. J. Representatives: William H. Srephenson, Albert C. McKee, K. P. Comstock. Distributors — Resuscitation Equipment, Drunkometers, Porto-Clinic Driver Testing Unit.	28-C	-
SAFWAY STEEL PRODUCTS, INC. 5228 W. Statz St., Milwaukee, Wisc. Representatives: James C. Jay, Daniel P. Closser, Robert T. Allis. Manufacturers—Sciffolding Towers, Saf-T- Swings, Special Products.	27-C	-	STONEHOUSE SIGNS, INC. 842 Larimer St., Denver 4, Colo. Representatives: Louis O. Graves, Floyd E. Essman. Manufacturers—Steel Accident Prevention Signs.	129-S	82
SALISBURY, W. H., & CO. 101 N. Morgan St., Chicago 22, III. Representatives: T. R. Claffy, W. H. Salis- bury, M. J. Allison, D. L. Reitz, C. Paul. Manufacturers—Linemen's Rubber Protec- tive Equipment.	90-91-S	72	SUGAR BEET PRODUCTS CO. 302 Waller St., Saginaw, Mich. Representatives: Lawren E. Lee, John Strickland, Kenneth Zehnder. Manufacturers—SBS Skin Cleanser and Cleaner.	19-5	-
SANI MIST, INC. 1724 Chestnut St., Philadelphia 3, Pa. Representative: L. M. Henry. Manufacturero—Athlete's Foot Preventive.	121-S	-	SURETY RUBBER CO. N. High St., Carrollton, Ohio Representatives: S. S. Hall, C. E. Roser, H. A. MacIntosh. Manufacturers—Rubber Gloves and Line-	54·S	80
SCHRADER'S, A., SON 170 Vanderbilt Ave., Brooklyn 17, N. Y. Representatives: F. J. Engstrom, A. S. Jorgensen, R. E. Jorgensen, J. J. Meister, E. P. Rielley. Manufacturers—Pneumatic Press Controls, Valves, Cylinders and Associated Products.	12-13-S	55	men's Equipment.  SURTY MFG. CO. 4139 W. Kinzie St., Ch'cago 24, Ill. Representatives: K. L. Barron, H. D. Huff, R. R. Kampe.  Manufacturere and Distributors — Safety Guards and Materials.	131-S	_
SCOTT AVIATION CORP. 207 Erie St., Lancaster, N. Y. Representatives: Earle M. Scott, Ralph P. Banks, L. E. Jordan. Manufacturers—Scott Air-Pak, Scott Demand Inhalator, Scott Demand Respirator.	21·S	41	TAYLOR, S. G., CHAIN CO. 3-141st St., Hammond, Ind. Nersentatives: O. W. Sandstrom, S. N. Morison, E. W. Chapman, E. O. Sand- strom.	8.5	68
SELLSTROM MFG. CO. 515 N. Aberdeen St., Chicago 22, III. Representatives: C. E. Dennis, P. E. Hoy, C. G. Anderson. Manufacturers—Face and Eye Protection Equipment.	30-S	188	Manufacturers:—Taylor Made Alloy Steel Sling Chains, Monel Chain; Hooks and Chain Fittings.  TENNANT, G. H., CO. 2530 N. Second St., Minneapolis 11, Minn. Representatives: E. A. Detweiler, George D. Billings, James Cossit, V. F. McCarthy, Joseph T. Lyon.	14-15-S	40
SENTRY SHOE CO., DIVN. GENERAL SHOE CORP. 19 7th Ave., Nashville 3, Tenn. Representatives: C. Guy Rudisill, Miller Y. Hunter, E. D. Peeler. Manufacturers—Safety Toe Shoes.	12-C	-	Manufacturers—Mechanized Equipment for Maintenance of Industrial Floors.  TRINAL, INC.	154-S	_
PENCER TURBINE CO. 86 New Park Ave., Hartford 6, Conn. Representatives: C. E. Ludwig, Norman S. Barnes, W. H. Brown, Jr.	67-S	38	Representatives: George E. Semple, J. J. Boughey, J. Roy Abell. Manufacturers—"Safest" Protection for the Metatarnal Arch.		
Manufacturers—Portable and Stationary Vacuum Cleaners and Dust Collecting Ap- paratus.  STANDARD SAFETY EQUIPMENT CO.  32 W. Ontario St., Chicago 10, III.	34-35-S	153	UNION WIRE ROPE CORP. 21st & Manchester Ave., Kansas City, Mo. Representatives: Robert B. Boand, Ray G. Noble, D. Blame Currence. Manufacturero—Tuffy Slings, Wire Rope	11-S	28-29
Representatives: Lawrence E. Dickson, Arthur O. Schmidt, Chester Craft, Ray G. Woodard, John deRoulet, Bob Christansen, Earl J. Hoagland, Tom Neill, Jr., Arthur Ramsdell, Mayuard Page, Robert J. Dec, Harry J. Miller Don Spoerer.	34-37-3	133	and Tuffy Towlines.  UNITED STATES DEPT. OF LABOR BUREAU OF LABOR STANDARDS Wainington, D	1-S	_
TEEL SCAFFOLDING CO., INC. 56 Humboldt St., Brooklyn 22, N. Y. Representatives: N. A. Engelen, C. H. Almstead, E. J. Beinecke, Jr. Manufacturers — "Trouble Saver" Steel Scaffolding.	97-S	56	UNITED STATES SAFETY SERVICE CO. 1215 McGee St., Kansas City 6, Mo. Representatives: R. J. Russell, T. J. O'Brien, C. R. Crons, D. T. O'Shea, H. J. Brons. Manufacturers—Eye Protection, Impregnated and Enteric Coated Salt Tablets, CO.	100-101-S	18-19
TEPAN CHEMICAL CO. 353 N. North Branch St., Chicago 22, III. Representatives: A. C. Stepan, Jr., W. J. Crepeau, S. W. Harris, Andrew Pruim, W. H. Poppe.	28-29-S	36	Indicators.  WALLACE OPTICAL CO., INC. 1025 Brush St., Detroit 26, Mich. Representatives: George W. Wallace, Jack E. Wallace, Donald Hornberget. Manufacturers.—Tuf-Cote Protective Eye.	8-C	200

C - Casino Room, Congress Hotel 5 - Exhibition Hall, Stevens Hotel

NAME	BOOTH NUMBER	PAGE NUMBER	NAME	BOOTH NUMBER	PAGE NUMBER
WATCHEMOKET OPTICAL CO., INC. 232 W. Exchange St., Providence 3, R. I. Representatives: Ernest A. Ring, John R. Watson, Dorothy Slothower. Manufacturers—"Eye-Savers" Plastic Eye Protection and Plasti-Glow Safety Signs.	141-142-S	12-13-14- 15-16-17	WILKINS CO., INC. 220 Groton Ave., Cortland, N. Y. Representatives: R. R. Wilkins, R. S. Wilkins. Manufacturers—K.Lens-M Products; Dispenser Cabinets, Lens Cleaner, Anti-Fogging Liquid, Lens Tissue.	58-S	62-70
WAVERLY PETROLEUM PRODUCTS CO. 1724 Chestmus St., Philadelphia 3, Pa	122-123- <b>S</b>	-	WILLIAMS JEWELRY & MFG. CO.  10 S. Wabash Ave., Chicago 3, Ill.  Representatives: Clarence J. Williams, C. B. Williams, Paul A. Williams.  Manufacturers—Safety Awards, Badges and Trophies.	48-S	175
WEST DISINFECTING CO. 42-16 West St., Long Islend City 1, N. Y Charles S. Gravatt, Glen A. Buerki, Thomas Z. Van Raalte, William J. Doedorants— Manufacturing Chemists — Disinfectants, Deedorants—Products for the Promotion of Safety.	88-89-\$	39	WILLSON PRODUCTS, INC. 2nd & Washington Sea, Reseding, Pa	107-108-S	9-10
WESTERN COCA-COLA BOTTLING CO. 515 Madison Ave., New York, N. Y	39-S	-	WILSON-ALBRECHT CO., INC. 3365 Wooddale Ave., Minneapolis, Minn. Representatives: Kermit H. Wilson, Frank X. Mangan, Richard A. Koretz. Manufacturers—Modern Unit Type First	17-C	-
WHEELER PROTECTIVE APPAREL, INC. 224 W. Huron St., Chicago 10, Ili. Representatives: Edison L. Wheeler, Katherine J. Wheeler, Hudson L. Wheeler. Manufacturers—Industrial Safety Cothing made from Asbestos, Flame-Proofed Duck and Jean Cloth, Lesther and Wool.	77-S	46	WYANDOTTE CHEMICALS CORP. Wyandorts, Mich. Representatives: R. J. Racine, E. J. Kubis, Lloyd Dunn. Manufacturers—Absorbents.	70-S	-

You are cordially invited to visit our booth and meet with members of our engineering staff during the 39th National Safety Congress October 8-12

BOOTHS 134 AND 135, EXPOSITION HALL, STEVENS HOTEL

### MARSH & McLENNAN

### Insurance Brokers

CONSULTING ACTUARIES AVERAGE ADJUSTERS

Chicago New York San Francisco Minneapolis Detroit Boston Los Angeles Pittsburgh Seattle St. Louis St. Paul Duluth

Indianapolis Portland Superior Cleveland Buffalo Columbus Phoenix Vancouver Toronto Montreal Havana London



- Comfort features throughout to get them worn
- Constant research assures latest developments in eye protection



### Make Safety a Habit as Well as a Slogan with WILLSON Safety Goggles



Heavy Duty Cup Goggle for chipping, grinding and snagging.



Cover-All\* Cup Goggle CCSO Heavy-duty; plenty of room for prescription glasses.



Cover-All Type Welding Goggle CW60 Tested Willson-Weld\* lenses conform to Federal Specifications.



Rubber Mask Goggle For chemical workers; rolled inner edge gives snug fit

Fitted with Super-Tough\* heat treated glass lenses or Willson Plas-Tought plastic lenses

"T.M. Reg. U.S. Pat. Oil.

Trade Mark



MonoGoggle' Wide vision replaceable plastic lens... flexible polythene frame for comfort.



Leather Mask Goggle Deep cups, well ventilated, for hot jobs.



Hi-Line Safety Spectacles Style AV Attractive metal frames; temples above the line of vision.

More than 300 Safety Devices Carry This Trademark Sold the World over

WILLSON PRODUCTS, INC., 205 Washington St., Reading, Pa.

### Call your WILLSON distributor for complete Eye and Respiratory Safety Service

ALBUQUEQUE, N. MEX—Hendrie & Botthoff Co.
ATLANTA, CA.—Fritton Supply Co.
ATLANTA, CA.—Fritton Supply Co.
BALTIMORE, MD.—Carey Mech. & Sup. Co.
BIRMINGHAM, ALA.—
COSTYLE, CIPTOR, CO.
SUFFALO, N. Y.—American Alisafe Co.
BUTTE, MONT.—Monitans Hardware Co.
CASPER, WYO.—Casper Supply Co.
CHARLESTON, S. C.—Cameron & Barkley Co.
CHARLESTON, W. VA.—
CASPER, WYO.—Casper Supply Co.—CHARLESTON, W. VA.—
CHICAGO, ILL.—Protective Equipment, Inc.
CINCINNATI, OHIO—The E. A. Kinsey Co.
CLEYLELAND, OHIO—Safety First Supply Co.
COLUMBUS, OHIO—The E. A. Kinsey Co.
DATTOM, OHIO—Stream Supply Co.—
DATTOM, OHIO—The E. A. Kinsey Co.
DATTOM, OHIO—The E. A. Kinsey Co.
DATTOM, OHIO—The E. A. Kinsey Co.
DEADWOOD, S. DAK.—
Mendrie & Boithoff Co.

DENVER, COLO. Hendrie & Bolthoff Co.

DENVER, COLO. Hendrie & Botthoff Co.
DETROIT, MICH.
The Chas. A Strelinger Co.
EL PASO, TEX.—E. D. Bullard Co.
GRAND RAPIOS, MICH.—F. Ramiville Co.
GREENSBORO, N. C. Smith-Courtney Co.
MICKORY, N. C. Smith-Cour

MILWAUKEE, WIS.

Protective Equipment, Inc.
MUSKEGON, MICH.—Factory Supply Co.
NEWBURGH, N. Y.—W. L. Smith Co.
NEW ORLEANS, LA.—

Woodward, Wight & Co., Ltd. NEW YORK, N. Y.—W. S. Wilson Corp. OKLAHOMA CITY, OKLA. Hart Industrial Supply Co. OMAHA, NEBR.

Hart Industrial Supply vo.

OMAHA, REBR.—
Interstate Machinery & Supply Co.
ORLANDO, FLA.—Cameron & Barkley Co.
PHILADELPHIA, PA.—
Industrial Products Co.
PITTSBURGH, PA.—Safety First Supply Co.
PORTLAND, ORE.—J. E. Hassitine & Co.
PROVIDENCE, R. I.—James E. Tierney
RICHMOND, VA.—Smith-Courteey Co.
ST. LOUIS, MO.—Stigo, Incorporated
ST. PALL, MIRN.—
Farwell, Camer, Kirk & Co.
SALT LARK CITY, UTAH—
Industrial Supply Co., Inc.

SAN FRANCISCO, CALIF.—E. D. Berlard Co. SANTA FE, N. MEX.—Hendrie & Botthoff Co. SANTA FE, A. Cameron & Berthyd Co. SCRANTON, FA.—L. B. Potter Co. SCRANTON, FA.—L. B. Potter Co. SCRANTON, FA.—L. E. Masettine & Co. SPOKANE, WASH.—J. E. Masettine & Co. SPOKANE, WASH.—J. E. Masettine & Co. SYRACUSE, N. Y.—Syracuse Supply Co. TACOMA, WASH.—J. E. Hasettine & Co. SYRACUSE, N. Y.—Syracuse Supply Co. TACOMA, WASH.—J. E. Hasettine & Co. TAMPA, FLA.—Cameron & Barkley Co.
TOLEDO, OHIO—Safety First Supply Co.
TROY, N. Y.—The Troy Betting & Supply Co.
TULSA, OKLA.—
Krisman Industrial Supply Co.

CANADA

SAFETY SUPPLY COMPANY

Toronto Montreal Kirkland Lake Winnipeg Edmonton

### New, Fast-Acting, Automatic "SMOKE-FIRE DETECTIVE



### For Air Conditioning

Smoke in your air conditioning spreads fast ... causes panic, spoilage and needless expense . . . now all can be avoided by installing a modern, fully approved C-O-TWO Automatic Smoke Detecting System.

Smoke, smoldering and fire are spotted in the incipient stage anywhere throughout the air conditioning ducts, as well as via the return air from air conditioned spaces. Four types of smoke detectors and several different installation arrangements are available to fit your particular needs . . . for small air conditioning units, for large air conditioning systems, and whether with or without electrostatic precipitators. All C-O-TWO Automatic Smoke Detecting Systems function by drawing continuous air samples through simple piping to a smoke detector. The first trace of smoke sets off an alarm, based on an exclusive operating principle ... no chance of smoke spreading ... the air conditioning instantly shuts down, dampers close and fire extinguishing systems actuate.

Act now for complete free information and descriptive literature on this newest contribution to modern fire fighting. An expert C-O-TWO Fire Protection Engineer will be glad to help you in planning economical. fully approved fire protection facilities without obligation. (Special assistance rendered to qualified air conditioning contractors.)



### DETECTING SYSTEM FOR AIR CONDITIONING DUCTS

- A perforated smoke accumulating pipe
- smoke accumulating pitot tube (alternate)
- pipe line for carrying continuous air samples to smoke detector
- smake detector
- audible alarm
- fresh air intake and duct
- return air duct
- air cleaning unit
- air fan
- air cooling and heating unit
- K supply air duct
- L fipor level



#### C-O-TWO FIRE EQUIPMENT COMPANY

NEWARK 1 . NEW JERSEY

Sales and Service in the Principal Cities of United States and Canada

Affiliated with Pyrene Manufacturing Company

MANUFACTURERS OF APPROVED FIRE PROTECTION EQUIPMENT

Squeez-Grip Carbon Dioxide Type Fire Extinguishers \* Dry Chemical Type Fire Extinguishers \* Built-In Smake and Heat Fire Detecting Systems
Built-In High Pressure and Low Pressure Carbon Dioxide Type Fire Extinguishing Systems



### Happy Eyes Stay Happy...

### when **EYE** stand guard!

Comfort and safety are assured — even on hot days — with MODEL 10G2 EYE-SAVER. A green frame with 18 or 32 air vents and shade No. 2 optical green shatterproof lens make it the ideal safety goggle—regardless of weather! Get complete details from your safety supplier or write direct.

WATCHEMOKET OPTICAL CO., INC.

PROVIDENCE . RHODE ISLAND

CYC

IN CANADA . LEVITT-SAFETY LIMITED, TORONTO 10, MONTREAL



### Trained Eyes Stay Trained...

### when **EYE** stand guard!

Trained eyes keep their skill when protected by Watchemoket's MODEL 1-N EYE-SAVER—the popular heavy duty goggle! Get complete information from your safety supplier, or write direct.

WATCHEMOKET OPTICAL CO., INC.

DINCE . THORY ISLAND

eye

IN CANADA . LEVITT-SAFETY LIMITED. TORONTO ID. MONTREAL I



## WATCHEMOKET CYC SAVERS T.M. Rog.



### the finest in plastics for dependable eye-protection

### MOLDED CURVED MODELS Fit ever most styles of rimless



Aiopti 7 (illustrated) Crystal clear plastic frame. Medium bridge size. Model 27 — large bridge size.

Medium bridge size. Model 29 – large bridge size.

MODEL 10 Transparent green plastic frame. Medium bridge size. Model 210 —large bridge size.

MODEL 1962 Transparent green plastic frame and green Impax® plastic lens. Medium bridge size. Model 210G2—large bridge size.

### SPECIAL EYE AND FACE PROTECTORS

MODEL 4456 Opaque "blackout" frame and lens. Medium bridge size only. Ideal for checking furnace heat. Other models for aluminum-working, x-ray, laboratory and physical therapy work.

PLASTIC
FACE - SHIELD
(illustrated)
Non-distorting lens; for
heavy - duty,
full-face

protection.



#### WELDING COVER LENS

Protects costly welding filters against pitting, hot metal splatters. Will not shatter under impact.

MOLDED SQUARE MODELS

Fit over most styles of prescription glasses.



MODEL 1-N (illustrated) Crystal clear plastic frame. Medium bridge size only.

MODEL 3-N "Blackout" plastic frame. Medium bridge size only.

MODEL 30 Extra-wide, crystal-clear plastic frame. Extra-large bridge size. Fits over widest safety lens spectacles.

### TUC^WAY

T. M. REG.

Extra-strong Plexene® plastic frame (511) shown with Semi-Cup lenses—has Retrax® metal temples with telescoping adjustment for perfect fit. (Frames also available with plastic club femples: Model 510).

### new lightweight, spectacle-type eye savers\*



Shatterproof methacrylate lenses are optically correct and can be replaced instantly.

5 colors:

CLEAR LIGHT GREEN MEDIUM GREEN DARK GREEN COBALT BLUE

#### ONE FRAME CAN BE USED INTERCHANGE ABLY WITH THREE TYPES OF LENSES:



with REGULAR SIDE SHIELD LENSES For ordinary eye hozards MODEL SILCSS



with FULL (1")
SIDE SHIELD
LENSES
for complete
side protection
MODEL SII CSSF



with NEW
SEMI-CUP
LENSES
over 90%
PROTECTION—
MODEL SII CSC

ALL EYE SAVERS LENSES ARE SHATTERPROOF . OPTICALLY CORRECT . INSTANTLY REPLACEABLE . N. REG.

### WATCHEMOKET OPTICAL CO., INC.,

PROVIDENCE 3, RHODE ISLAND

In Canada:

Levitt-Safety Limited, Toronto 10, Montreal 1



### Bright Eyes Stay Bright...

when **EYE** stand guard!

Workers like the exclusive features of Watchemoket's TUC-AWAY goggle. Welded Retrax "telescoping" temples and change-around lens land give comfortable fit and sure eye protection. Get complete details from your safety supplier or write direct.

WATCHEMOKET OPTICAL CO., INC.



LEVILL-SAFETY LIMITED, TORONTO 10.

## SAV Ewith CHEEPEE



### SAVE EYES

Cheepee goggles are made of shatterproof acetate, molded in one piece to give positive, close-fitting eye protection. Plastic lens exceeds federal specifications for optical quality and resistance to breakage. Cheepee goggles are comfortable to wear, too! They weigh less than one ounce and fit over most style glasses. Available in clear or green.

### SAVE MONEY

Cheepee goggles are the lowest cost, one-piece acetate, quality goggles in their field. Start saving with Cheepee — now!



WATCHEMOKET OPTICAL CO., INC.

PROVIDENCE . RHODE ISLANI

IN CANADA . LEVITT-SAFETY LIMITED, TORONTO 10. MONTREAL 1



Put Plasti-Glow signs to work in your plant now! Ask your local dealer to show you actual Plasti-Glow signs. Or write direct for a small sample of Plasti-Glow material and a list of standard sign wordings sizes letc. Get complete details today!

WATCHEMOKET PLASTI-GLOW SAFETY SIGNS



WATCHEMOKET OPTICAL CO., INC.

SIGN DIVISION . PROVIDENCE . RHODE ISLAND

IN CANADA . LEVITT SAFETY LIMITED, TORONTO 10, MONTREAL 1

### the SAF-I-TRIPLETS

these three models offer full protection from all impact, chemical and dust hazards.

pioneers in the field



SAF-I-SHIELD-Rugged one piece design-Full protection from all impact hazards-One size fits everyone-Low Cost-Genuine Comfort.

> SAF-I-SPEC-Low cost replaceable one-piece lens can be quickly and easily changed. Lens interchangeable with SAF-I-DUO. Snug fitting comfortable temples.



SAF-I-DUO-With replaceable lens made of Optilite or acid resistant plastic. Velvet soft, durable VINYL frame. Full protection from chemical splashes, impacts, fumes and dust,



All three have these features

- made of Optilite
- optically correct
- genuine comfort
- fit over personal glasses
- smart appearance
- meet federal specifications for impact resistance

Write for literature and prices

### United States Safety Service Co.

Kansas City 6, Missouri Branches in Principal Industrial Cities
IN CANADA PARMELEE, LTD. TORONTO

### First Again!

e them at the National

BOOTHS 100 and 101

- First to manufacture optically molded Plastic Eye Protection.
- First to design a plastic spectacle lens interchangeable with a Cover Type Goggle.
- First to introduce Enteric Coated Salt Tablets.
- First to introduce Impregnated Salt Tablets.
- First to manufacture an Expendable (Throw Away) Salt Tablet Dispenser.

Our Research and Development Staff is now working on several new products which we believe will result in some more "Firsts".

Our Engineering Department is constantly working to improve the design of our present products and many improvements have been made in the past year.

We want to give full credit to the fine acceptance of our products by the user, which has made these "Firsts" possible.

### UNITED STATES SAFETY SERVICE CO.

**Branches in Principal Industrial Cities** 

**Safety Congress** 

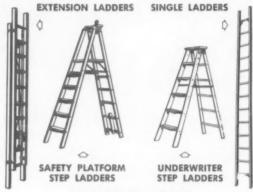
IN CANADA PARMELEE, LTD. TORONTO

### Gold Medal LADDERS SCAFFOLDING

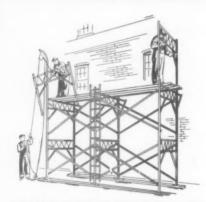
. . by the leaders in the scaffolding industry!



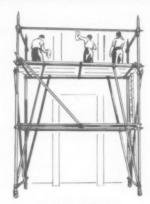
GOLD MEDAL
SAFETY EXTENSION TRESTLES



GOLD MEDAL LADDERS
(Also Magnesium Ladders)



"TROUBLE SAVER" SECTIONAL STEEL SCAFFOLDING



GOLD MEDAL
TUBELOX ROLLING SCAFFOLD

See Our Exhibit at the NATIONAL SAFETY CONGRESS

HOTEL STEVENS, CHICAGO, OCTOBER 8 to 12, 1950

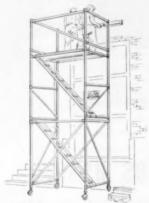
VISIT BOOTHS 98 and 99

Members of our staff will be on hand to welcome you and discuss your scaffolding problems.

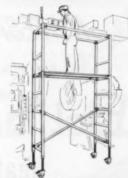
### ALUMINUM

## JM SCAFFOLDS

... for the leaders in industrial safety!



SECTIONAL ROLLING SCAFFOLDS\*



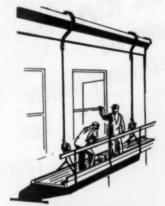
SECTIONAL LADDER SCAFFOLDS\*

\* Aluminum scaffolds are available with extension legs having either standard screw adjustment or "Quick-Adjustable" mechanism.

STEEL or ALUMINUM



TUBELOX SCAFFOLDING



**SWINGING SCAFFOLDS** 



For Greater Safety . . . Efficiency . . . Economy

HE PATENT SCAFFOLDING CO. Inc

38-21 12th Street, Long Island City 1, New YorkDept. NSN,1550 Dayton Street, Chicago 22, Illinois

There's always something NEW at HY-TEST!

NOW... feature exclusive

### BolTan

up to twice the wear per pair

Bol Tan
insoles are
extremely flexible
and

Bol Tan leather insoles are sweat resistant

.. Insure Workers' Feet in Sure Protection



THE WORLD'S LARGEST SELLING SAFETY SHOE
HY-TEST DIV: INTERNATIONAL SHOE COMPANY . SAINT LOUIS 3, MISSOURI

## HY-TEST SAFETY SHOES Boltan leather insoles

Bol Tan
insoles
stay soft
and
pliable
through-

shoes...Hy-Test Safety Shoes with Bol Tan leather insoles.

After years of research, experimentation and testing, the makers of Hy-Test Safety Shoes have perfected Bol Tan, a revolutionary new yearst resistant insole that added

and testing, the makers of Hy-Test Safety Shoes have perfected Bol Tan, a revolutionary new sweat-resistant insole that adds up to 100% to the life of Hy-Test shoes. Tested under foundry working conditions

Now, at no extra cost you can provide

your workers with longer lasting safety

Bol Tan insoles were not only found to outlast ordinary insoles, but remain extremely flexible and comfortable throughout the life of the shoe.

No other safety shoes feature Bol Tan, a Hy-Test exclusive; developed, proved and produced by International Shoe Company.

Bol Tan

insoles will

not curl, crack or dry out because of perspiration Be sure to see
HY-TEST'S COMPLETE LINE
over 60 different types and styles
for every industrial requirement
Featuring
Bol Tan Insoles and Winguard 400

Steel Box Toes

BOOTH 95—STEVENS HOTEL

National Safety Congress

and Exposition

Chicago—Oct. 8-12

HY-TEST

SAFETY SHOES

THE WORLD'S LARGEST SELLING SAFETY SHOE
HY-TEST DIV: INTERNATIONAL SHOE COMPANY . SAINT LOUIS 3, MISSOURI
NEW YORK OFFICE: SUITE 1788, 225 W. 347M ST. . EASTERN OFFICE: MANCHESTER, M. R.



## The Safety Stars



#### McDonald SAFE-T-HAT

Light aluminum alloy, ribbed crown for extra strength. Shock-absorbing headband is interchangeable and adjustable. Two shell sizes fit all heads.



#### McDonald CLEAR-VUE DUSTFOE

RESPIRATOR U.S. Bureau of Mines approved for all dusts, including lead dust, or pneumoconiosis-producing dusts and mists. Cushioned, aluminum face piece insures comfort...clear plastic filter holder for instant filter check.



#### McDonald T-HAT WITH FOLD-BACK

PACE SHIELD For eye and face safety snaps quickly onto "T" hat, folds back when not in use. Standard length 6"—also available in 8 or 9 inches. Clear or green cellulose acetate in .030 gauge or heavier.



#### McDonald FACE SHIELD

Full vision with full safety. Protects face, eyes, forehead against sparks, molten metal or fragments. Lightweight, fog-resistant plastacele. Leather sweatband, rubber headband. Four sizes available with or without binding.





GWEN CALDWELL MISS SAFETY OF '51



McDonald KANISTER KIT

On-the-spot first aid for workers.

Sturdy extruded aluminum Kanister holds handy roll-up kit containing vital first-aid supplies. Dust and weather-proof.



#### McDonald SAFETY BELT

For derrickmen — available in two types: lightweight, quick cast-off Type "S" with 3" body pad and Type "R." D ring always stays in same relative position. Adjustable—28" to 48".



#### McDonald SAND BLAST HELMET

Lightest, most compact helmet on the market!

Made of strong duralumin. Features positive
pressure control—top safety for operators.

### SEE OUR BOOTHS

at the National Safety Congress
SPACES 61 AND 62



PER. DONALD COMPANY

M'DONALD CO.

Manufacturers and Distributors of Industrial Safety Equipment

2321 Milam Street, Houston 6 5721 West 96th St., Los Angeles 45 1255 Howard Street, San Francisco 3

## Injuries again going

AO's Complete Line
of Safety Equipment
will Safeguard
your Workers —
Cut Your Costs!

New Workers and Longer
Hours Reverse Three Year
Downward Trend. At the End
of the First Quarter, the Injury
Frequency Rate Was 16%
Higher Than a Year Ago.

Industrial accidents cost \$40 per worker in 1950\*
...fand accidents are rising in 1951. \$40 per worker
is a lot of money, and the National Safety Council
observes: "In companies or industries with high injury rates, or in which little has been done about
safety, the cost per worker probably would be
much higher."

Proper safety equipment can't prevent all accidents but combined with wise safety regulations which are adhered to, it can reduce to the vanishing point both the number of plant accidents and their severity.

Every working day throughout America and foreign countries AO's COMPLETE LINE of quality protective products in goggles, respirators, clothing and gloves is saving money and man hours—as well as eyes, limbs and lives. For completeness of supply, quality of product, convenience to your plant and high standard of service, it will pay you to call your nearest AO Safety Products Representative—always.

\*ACCIDENT FACTS-1951 Edition

American Optical Optical SAFETY PRODUCTS DIVISION

### up in 1951!

### COMFORTABLE SAFETY GOGGLES THAT PROTECT!

In the extensive line of AO Safety Goggles are over 20 products. Want a spectacle type Ful-Vue? AO has it — in metal or plastic. Want a goggle with exceptional wide-angle vision? AO has it in the "Panoram" and other models. Similarly, AO has the specific goggle that meets each worker's needs and preferences for welding, dust protection, foundry work, chipping, chemical operations, and blasting—every industrial use.

### COMFORTABLE PROTECTIVE

In safety clothing, AO can protect your workers from head to foot with long wearing, non-cumbersome materials that meet workers' requirements. Whether the hazard is flame, heat, hot metal splashes, rough stock, oil, grease, acids or alkalis — AO has the product that will do the job — and do it seell . . . in asbestos, cowhide, horsehide, flame-resisting duck and the new "Protectocote" line of neoprene latex. Look for this quality protection in gloves, mittens, hand pads, finger guards . . . in coats, jackets, leggings, spats . . . in aprons and sleeves.

### COMFORTABLE RESPIRATORS THAT PROTECT!

In respirators too, AO has MORE TO OFFERITED IN THE PROPERTY For instance, the R5000 line of twin cartridge respirators. By quick interchanging of threaded cartridges and disc filter on one basic face piece, any of seven respirators is provided for protection against dusts, vapors and gases. Another respirator which has proved its worth on the job is the R2000 with its 7 types of cartridges and filter. A "twist of the wrist" interchanges all cartridges, its chemically treated felt throwaway filter with the efficiency of filters eight times as large is revolutionary in the industry.

SEE AO Products at Booths 79, 80, 81 at National Safety Congress Show, Chicago, Oct. 8 thru Oct. 12





### FIELD PROVED

### **Unique 9 Part Fabric**

Its patented construction is entirely unlike any other. Scores of wires are stranded in 9 parts, then into three parts.

#### Interlaced By Machine

On special precision machines, originated by Union Wire Rope engineers, three threestrand parts are so interlaced as to form a sling fabric so much stronger, with so much tougher wearing qualities and with so much more flexibility that you just have to see how much longer service it gives to believe it.

#### Constructed To Prevent Rotating of Load

The inequalities of hand made slings are eliminated. The parts of Tuffy Sling fabric are so uniquely interlaced that they neutralize the load torque which causes rotating of the load on straight pulls.

#### PATENT NO. 2,454,417

### Tested Strength Is Twice Safe Working Load Limits

Metal tags on Tuffy Slings give their safe working load. Each sling or leg of a bridal sling is proof-tested to twice this safe working load.

### 95% of Fabric Strength Is Developed In the Eye Splices

Here the unique interlacing of Tuffy scores again. It permits ready forming of eye splices possessing 95% of the strength of the sling fabric.



Super TOUGH



### FLEXIBLE

REG. TRADE MARK





## Luffy

Working any sling under load with knots or kinks in it is not recommended. But, sometimes it's unavoidable. Then is when the ultra-flexibility of Tuffy Slings stand you in good stead. Tuffy can take more of such punishment longer and you can straighten them out more often without material damage. The same is true of flattened eyes and because of the unique interlaced fabric construction, cutting of any one of the 9 strands will not result in stranding of the sling.

For a long time now, Tuffy Slings have proved they have the extra strength and ultra-flexibility to stand up during longer service on any kind of a load, under any kind of pull and with every type of hitch.

Try any one of the 9 factory packaged sizes. Prove their money-in-your-pocket worth to you to your own satisfaction.

Tuffy Sling Fabric also Available for Eye Splicing in Your Own Rigging Loft

If you are rigged for eye splicing your own slings, Tuffy Sling fabric is available on the reel. Your riggers will like the ease and speed of splicing that Tuffy interlaced construction affords.

n

### UNION WIRE ROPE CORPORATION

2224 MANCHESTER AVE.

KANSAS CITY 3, MO.



rehensive
Tuffy Sling
Handbook including complete Riggers
Manual.



BY	TITLE
ADDRESS	
CITY	ZONE

OR ALL THAT'S NEW IN SAFETY ACKED BY A UNIQUE PLANT-SOCK-SAVER TOE LINING MOCCASIN STYLES NEW DUAL-DUTY OXFORDS

SHOES



TESTED PROGRA

LEHIGH

VISIT
BOOTH
87
NATIONAL
SAFETY
CONGRESS
Chicago



NEW HI-CUTS

LEHIGH

SAFETY SHOE COMPANY ALLENTOWN, PA.

### MACWHYTE SLINGS AT WORK

These pictures illustrate the wide range of material being handled by Macwhyte Slings in hundreds of plants.



ATLAS Type 1 Round-Braided Slings lifting marine engines



MONARCH Type 1 Slings handling boiler



MONARCH Type 1 Slings handling roll



ATLAS BH-2 Round-Braided Sling handling sheet pack



DREW Flat-Braided Slings loading refinery vessel



ATLAS Type 1 Round-Braided Slings handling gun



DREW Flat-Braided Sling assemblies moving refinery tower



ATLAS Type 5 Round-Braided Slings handling tank



ATLAS Type 1 Round-Braided Sling lifting water turbine shell



MACWHYTE Lift Beam and MONARCH Slings handling sheet steel



DREW Type 5 Flat-Braided Slings lifting section of submarine

### MACWHYTE COMPANY

2902 Fourteenth Avenue, Kenosha, Wisconsin. Mill Depots: New York • Pittsburgh • Chicago • Minneapolis • Fort Worth • Partland • Seattle • San Francisco • Los Angeles. Distributors throughout U.S.A. Manufacturers of Internally Lubricated PREformed Wire Rope, Braided Wire Rope Slings, Aircraft Cables and Assemblies, Monel Metal and Stainless Steel Wire Rope.

Complete information gladly furnished on request.



Here are shown three Macwhyte E-2 Slings. Each has a different body design.

### Many sizes and constructions

All Macwhyte Slings are made to order in the size ... length ... type and body design ... to meet your needs.

Take advantage of our experience and save time and money. For complete information write to Macwhyte Company or any Macwhyte authorized distributor.

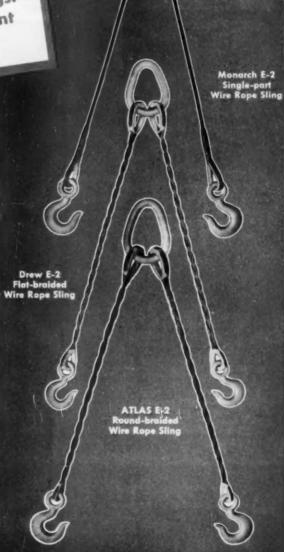
Member National Safety Council



For cranes and hoists use PREformed Monarch Whyte Strand Crane Rope made by Macwhyte Company



MACWHYTE COMPANY KENOSHA, WIS.



### FIRST AIDS TO SAFETY FROM GARDWELL CATALOG NO. 50



GARDWELL No. 66 Util"v First Aid Cabinet has pull-out ledge at bottom that forms working shelf. Has water cup dispenser at side. Contains 58 items. Size 36" x 24" x 9".

GARDWELL FIRST AID CABINET GARDWELL "SANKEY" FOOT GUARD



Designed to be worn over aboe. No discomfort nor loss of efficiency. Fits all shoes-no left or right. Furnished in 3 sizes and two thicknesses of steel or cluminum.

GARDWELL SAFETY BELTS



Made in a wide variety of styles from web or leather or a combination of both. The No. M-601, illustrated, is an ideal body belt for climbing or working in close ouarters. Has 4" body pad securely at-tached to belt. Rawhide reinforcement where Dee is attached. Special tested hardware.

#### **GARDWELL KNEEL-EZ KNEE PADS**

GARDWELL CARBOY POURER



Made of cold rolled steel, equipped with combination tread of rubber, cord and ridges, and with self sharpening spike with tool steel core, these Ladder Shoes are approved by Underwriters Laboratories for all surfaces. Painted yellow to attract attention and avoid accidents.

And, of course, a complete line of GARDWELL Asbestos clothing, gloves, mittens, leggings.



Built entirely of rubber with sponge rubber cushion in inside. Fit any knee, fasten with adjustable straps. Do not slip when walking. Recommended for jobs where workers are constantly on knees.

Visit the GARDWELL EXHIBIT at National Safety Congress, Booths No. 55 & 56 and learn about all GARDWELL PRODUCTS.



GARDWELL No. 1264 Carboy Pourer handles acids safely and easily. Com-pletely drains carboy by tipping until handle touches floor. Made for 5-gallon and 12-gallon carboys. Specify size in ordering.

SEND FOR A COPY OF GARDWELL CATALOG NO. 50, DESCRIBING ALL GARDWELL SAFETY CLOTHING AND EQUIPMENT.

afety CLOTHING AND EQUIPMENT DESIGNERS AND MANUFACTURERS 1990 EAST 69TH STREET CLEVELAND 3, OHIO

PHONE HENDERSON 2-0400

9 WAYS
that helped cut
Accident Frequency
Accident 7%+

for WEST VIRGINIA PULP and PAPER CO. Tyrone Mill



Explosive gas concentrations are detected with an M.S.A. Explosimeter before welding crews move in.



Potential carbon monoxide danger zones are probed regularly with the M.S.A. Carbon Monovide Tester



Where chlorine gas concentrations are pres ent, workers are safeguarded with M.S.A. chlorine aas masks.



Harmful dusts, present during lime kiln operations, are combated with M.S.A. "Comfo" Respirators.



Light concentrations of chlorine gas and sulphur diaxide are trapped in the chemical cartridge of M.S.A. "Gasfoe" Respirators.



Smoke, fumes and gases are exhausted from enclosed areas with M.S.A.-Lamb Air Movers before workers enter.



Safety stations equipped with M.S.A. Industrial Gas Masks, First Aid Kits, and Stretchers are available for emergencies.



Emergency protection for chlorine plant workers is provided by M.S.A. Industrial Gas Masks in individual lockers.



Cleaning respirators daily in plant "laundry" assures sterile, desirable protection for workers at all times.

Faced in 1944 with the worst annual safety record in the company's history, officials of the Tyrone (Pa.) Mill of the West Virginia Pulp and Paper Company decided to do

something about it.

An intensive and continuing educational An intensive and continuing educational program, stressing the proper use of safety equipment, protective devices, and instruments, was put into operation. Within a six year period, the company's accident frequency rate had dropped from a record breaking high of 63.39 to an award winning low of 1.88.

MINE SAFETY APPLIANCES COMPANY

Breddock, Thomas and Moade Sts., Pitsburgh 8, Pe. At Your Service: 48 Bronch Offices in the United States Miss Eathy againstee Es at Essat Limited Toronto, Moetreal, Calgary, Winnipeg, Vancouver, New Gargow, N.S.
Representatives in Principal Cities in Maxico, Exeiral and South America
Cable Address: "Minsof" Pittsburgh

Dependable M.S.A. equipment played an important role. The illustrations above show several ways in which this equipment is used to protect employees on the job and in emergencies.

If you're not satisfied with your present afety record, and would like to do someshing about it, you'll find a lot of sound safety know-how, backed by a complete line of proved safety equipment, at your nearest M.S.A. Office. Write,

wire, or phone—we'll be happy to discuss your problems with you.



# Listen! LET YOUR WORKERS TELL YOU WHY BANISHING "Factory Hands" LIFTS MORALE

THIS STEPAN CLEANSER SURE TAKES THE STING OUT OF WASHING UP!

IT SURE DOES! MY HANDS HAVEN'T LOOKED AND FELT THIS GOOD SINCE I STARTED WORKING HERE.



grime — gently, swiftly. Recom-mended for oily operations or where workers are in contact with known skin irritunts.

STEPAN'S revolutionery NEUTRA-FOAM - not a soap - a new mild synthetic skin detergent.



Fast-but gentle-pH6 takes the hazard and irritation out of wash ups. Raw, red "Factory Hands," the uncomfortable and often inefficient result of scrubbing with harsh cleansers, can be a thing of the past with pH6 in your plant washrooms.

STEPAN pH6 was carefully formulated to protect the worker involved in oily or greasy operations. The low pH of this cleanser lessens the hazard of occupational dermatitis—means

better morale and greater efficiency to you. STEPAN NEUTRA-FOAM, a new, synthetic, lathering skin cleanser con-

centrate is truly neutral, having a pH of only 7.2. NEUTRA-FOAM will not hydrolize and form free alkali, which tends to destroy the protective acid mantle of the skin.

for FREE SAMPLES and complete technical data SEE US AT BOOTHS No. 28-29 NATIONAL SAFETY CONGRESS

THE STEPAN CHEMICAL CO.

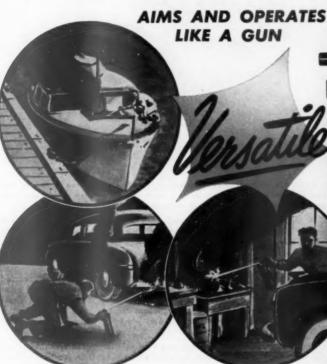
1353 N. North Branch St. Dept. NS10, Chicago 22, Ill. NEUTRA-FOAM has other advantages, too. Employees like its rich, abundant lather. And this cleanser leaves no lingering, disagreeable soapy odor on the skin.

NEUTRA-FOAM can be shipped anywhere at any time of the year. It is readily and completely soluble in all proportions with water. And it's neat in use.

# STEPAN REPRESENTATIVES

HOUCAN SALES P. O. Box 4082, Belon Rouge, Lo. THE GENERAL EQUIPMENT CORP. 261 Franklin St., Boston 10, Mass. THE WATSON CO. 1443 Main St., Buffale B, N. Y. SAFETY FIRST SUPPLY CO. SOUS Euclid Ave., Cleveland, Ohie SECO SAFETY PRODUCTS CO. 1437 Brooklyn Ave., Detroit 26, Mich. GUARDIAN SAFETY EQUIP. CO. 491 Prospect St., East Orange, N. J. GUARDIAN SAFETY EQUIP. CO. 1915 Westheimer, Houston 6, Texas KOPPELMYER SAFETY CO. 6237 North Park Ave., Indianapolis 5, Ind. BELLOWS & CO. Howells Ridge Rd., Knexville, Tenn. GUARDIAN SAFETY EQUIP. CO. 6104 S. Main St., Los Angeles, Celif. JOE FARRINGTON, INC. 59 N.W. 10th St., Miami 32, Fla. W. H. POPPE 4920 Harriet Ave., Minneapelis, Minn. SANITATION SUPPLY CO. 731 Lincoln Ave., Peeria, III GUARDIAN SAFETY EQUIP. CO. 4606 Walnut St., Philadelphia 39, Pa. SAFETY FIRST SUPPLY CO. ogee St., Pittsburgh, Pa ROCHESTER SAFETY EQUIP. CO. STANDARD CHEM. CO. 1918 Washington St., St. Louis 3, Me. GUARDIAN SAFETY EQUIP. CO. 18751/2 E. 17th St., Tulsa 4, Okla.

NEW 1 QUART STORED PRESSURE FIRE EXTINGUISHER . . .



# ALFCO AIR PRESSURIZED FIRE-GUN

Aims like a gun... trigger-quick action... hits target instantly, accurately... discharges one quart of Fire-Gun Fluid... compressed air expelled... no pumping... excellent range 25 to 30 ft... operates with one hand... easily recharged... pressurize with any standard air chuck exerting 150 psi... will not freeze.

This is the newest and most effective one quart fire extinguisher for Class B and C fires we have yet designed. Inspected and approved by Underwriters' Laboratories. Write for fully illustrated literature.



of Loadorship in 11112 PROTECTION AMERICAN-LAFRANCE-FOAMITE ELMIRA-NEW YORK-U.S.A. Corporation

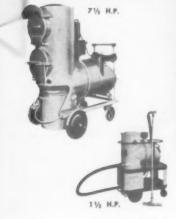


You are cordially invited to visit our booths, 116 and 117









# Safety and Safety and Sanitation COST LESS WITH SPENCER VACUUM

Hundreds of plants have secured a much higher degree of safety and sanitation with Spencer Vacuum at a much lower cost than could have been obtained with ordinary cleaning methods.

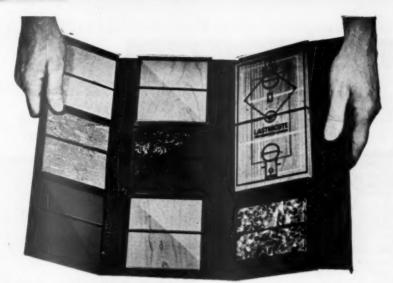
A maintenance crew for instance, can keep large floor areas "clean enough" by hand methods, if given enough time. Spencer Vacuum would enable the same crew to clean the floors twice as often, and would remove all dangerous dust, as well as the more bulky aftermath of a busy production day.

Then there are many other plant improvements which cannot be secured any other way. Spencer Vacuum is being used to remove welding and other toxic fumes at their source. It handles hot materials, keeps the dust count down in foundries and picks up magnesium chips. It also removes liquids from floors and 132 other essential uses which are described in Spencer Bulletin No. 144.

The Spencer 11/2 and 71/2 h.p. portable vacuum cleaners illustrated are the most popular sizes for busy industrial plants. Stationary Vacuum Systems for the big jobs of industry are made in catalog sizes up to 100 h.p. They are described in Bulletin No. 125.

SEE SPENCER AT BOOTH NO. 67





# VISIBLE PROOF that may save you the cost of a new floor!









A professional kit—specially designed for visual comparison. Contains virtually every type of flooring made from linoleum to terrazzol One-half of each flooring sample is untouched—while the other half is coated with the West sealer or finish formulated to preserve the surface indefinitely. Select the sample that applies to you. Inspect the treated and untreated surface. Scratch it. Burn it. Soak it. Choose the finish that meets your requirements—without moving from your desk!

Now make the only true test. Pick one or more test patch sites in your heavy traffic areas. In front of washstands . . . doorways . . . elevators. Your West representative will show your maintenance man how to prepare the floor and apply the proper West finish. Or, if necessary, he'll roll up his sleeves and lay down the material himself! When the test period is over . . . you be the judge.

—And still the job isn't complete. As your West representative knows, the science of floor preservation is a three-fold job. Each step is vitally important to the continued beauty and long-wearing properties of your floors . . . all three are described in our booklet, "The Proper Care of Floors". A copy is yours for the asking. An actual demonstration is as close as your nearest West office.

Just mail the coupon!

West Disinfecting Company 42-16 West Street Long Island City 1, N. Y.

Dept. 7

- ☐ Please send a copy of "The Proper Care of Floors"
- Please have a West representative bring me the booklet . . . and show me the visual comparison kit

Address

Company

City

Zone\_\_\_Sto



### How TENNANT machines help

# save the most manhours ALL floor-cleaning

HEAVY GRIME in one fast

(B) (135)

Faster than a crew of men, one of these powerful machines pulverizes tough, grease-caked grime ... picks it up in one operation. Saves hours of costly hand work. Leaves floor ready for immediate traffic.

REQUIRES ONLY 1 MAN. As your operator guides machine over floor it cleans a path 16" wide . . . removes up to 20 lbs. or more of dirt per minute. Has ample power for tough jobs.

CUTS DIRT LOOSE, PICKS IT UP. Revolving cylinder instantly shears away hard-packed grease, chips, paint . . . hurls it into hopper; vacuum controls dust. Does entire job DRY; no chemicals or water; no need to rope off areas.

SMOOTHS AND LEVELS SURFACE. Planing action of cylindrical wire brush or Revo-tool levels humps . . . leaves ideal surface for trucking; will not dig or gouge. Available in 3 standard sizes: 16", 12" and 8". Specify gas or electric model.



SEVERAL MER WITH SCRAFERS, working of top speed, couldn't de the job of this one man— cleaning shop floors with a Tennant "K" Floor Machine. Removes heaviest grime in 1 fast operation, cleaning path 16" wide. Instently provides clean, dry, level surface. Gas or elec-tric; complete accessories for ALL jobs.

MODEL "J" cloons 12" path can be used in congested areas

For fast SWEEPING

ENNANT Power Sweepers

Used by 15 of the top 20 firms " in the U.S. (and by hundreds of others), Tennant Power Sweepers have a well-earned record for long, dependable service . . . plus outstanding cost-saving performance. We know of no maintenance equipment that pays for itself so promptly.

SWEEPS AN ACRE AN HOUR. With a Tennant Model 36 Sweeper one man sweeps up to 54,000 sq. ft. per hour (open areas) . . . at speeds to 6 M.P.H. Cleans path 36" wide (48" wide if side brush is also used).

DOES EXTRA-CLEAN JOB. Brush revolves inside vacuumequipped compartment . . . whisks up litter and debris; even cleans many cracks and crevices; helps cut costs.

EASY TO USE, TURNS "ON A DIME". With its rear-wheel steering, reversing clutch, etc., the Model 36 is ideal for busy plants. Easier to drive than a car! Gas or battery models: also in 24" unit (see photo).

\*Top 20 non-financial firms ("Business Week", 5-12-51)

Write today! Get illustrated bulletins, case histories, cost data. Specify size of machine, savings desired, type of soilage, etc.



menhour-savings made by Tennent Model 36 Power Sweepers put if in a class by itself. One big U.S. firm has 60 of them ... and one unit paid for itself in 22 days. 'Case histories on

paid for Isoft in ZZ days. Nase misrotres on request.)
Machine has capacity of 34,000 sq. ft. per hour, cleans a 36° path, has combined brush-and-vacuum system for extra clean wark. Has 7.3 hp. engine, drives tike a car. Suit for heavy-duty work. New available in GASOLINE and BATERY TYPE models.





MODEL "24" sweeps narrow



OFFICES IN PRINCIPAL CITIES

### G. H. TENNANT CO.

2550 N. Second Street Minneapolis 11, Minnesota

### INDUSTRIAL FLOOR MACHINES

ES OF THE TENNANT SYSTEM OF FLOOR MAINTENANCE—MANUFACTURERS OF

Safety Suggestion: Tear Out and File for Ready Reference

### Scott Air-Pak Safety Breathing Equipment is sold by:

ALBANY, NEW YORK-Kidde Lax Products Co. ATLANTA, GEORGIA-Southeastern Fire Ext. Sales Co. BILLINGS, MONTANA-Big Horn Supply Co. BIRMINGHAM, ALABAMA-Safety Engry. & Supply Co. BOSTON, MASS .- American Fire Equipment Corp. BUFFALO, NEW YORK-American Allsafe Co. CHARLESTON, W. VA .- Bafety First Supply Co. CHICAGO, ILLINGIS-Protective Equipment Co. CINCINNATI, OHIO-Scaling Supply Co. CLEVELAND, OHIO-Safety First Supply Co COLUMBUS, OHIO-W. E. Bran per Co. DAYTON, OHIO-The Dayton Safety Supply Co. DENVER. COLORADO-"Mas" Galley Equipment Co. DETROIT, MICH .- National Safety Prod. & Service Co. DULUTH, MINNESOTA-W. P. & R. S. Mars Co. EAST ORANGE, N. J .- E. H. Notte FORT SMITH, ARKANSAS-Interstate Fire Equip. Co. GREENSBORO, N. C .- Southern Oxygen Co. HAMDEN, CONNECTICUT-8. B. Maxwell Co HOUSTON, TEXAS-Allied Safety Equipment, Inc. KALAMAZOG, MICHIGAN—Safety Services KANSAS CITY, MISSOURI—Safety, Incorporated KINGSPORT, TENNESSEE-Southern Daygon Co. LOS ANGELES, CALIFORNIA-E. D. Bullard Co LOS ANGELES, CALIFORNIA-Dickson Safe v Pred. Co. LOUISVILLE, KENTUCKY-Orr Safety Equipment Co. MARINETTE, WISCONSIN-Queen City Supply Co. MINNEAPOLIS, MINNESOTA-C. L. Ammerman Co. MINNEAPOLIS, MINNESOTA-Minnesota Fire Equip. Co. NEW YORK, N. Y .- E. H. Notte, E. Grange, N. J. OMAHA, NEBRASKA-Andersen Fire Equipment Ca. PHILADELPHIA, PA .- Guardian Safety Equipment Co. PHOENIX ARIZONA-Thunderbird Sales Corp. PITTSBURGH, PA .- Safety First Supply Ca PORTLAND, OREGON-American Elkhart Co RENO. NEVADA-Nevada Fire Extinguisher Service ROANOKE, VIRGINIA-Southern Gaygen Co. ROCHESTER, N. Y.-Rochester Safety Equipment Co. ST. MARYS, PA .- C. H. Yetzer & Sen ST. LOUIS, MISSOURI-Safety, Incorporate SALT LAKE CITY, UTAH-Univ. Saf. & Fire Equip. Co. SAN FRANCISCO, CALIF.-E. D. Bullard Co. SEATTLE, WASHINGTON-American Elikart Co. SEATTLE, WASHINGTON-L, N. Curtis & Sons SYRACUSE, NEW YORK-Syracuse Supply Co TOLEDO, OHIO-Safety First Supply Co. TULSA, OKLAHOMA-Guardian Safety Equipment Co. UTICA, NEW YORK-Link Fire Extinguisher Service WASHINGTON, D. C .- Southern Oxygen Co. WHEELING, W. VA .- Safety First Supply Co.

EXPORT AGENT (Except Canada)
Southern Oxygen Co., Inc.

WASHINGTON REPRESENTATIVE Palmer & Kline



Low operating cost; used by hundreds of industrial plants to give comfortable, complete protection for routine inspection or emergency work in toxic atmospheres.

### EASIER Oxygen Treatment — with the Scott DEMAND Inhalator

Breathing Equipment in your plant.

Scott Air-Pak delivers cool, confi-

dence-inspiring air (not oxygen), elim-

inating unnecessary hazards-especially

in the presence of petroleum vapors.

In first aid room or "on the spot" oxygen can be given safely and economically, with the Scott Demand Inhalator. Low-cost oxygen unit featuring "demand" principle, with constant flow available
"at the touch of a button." Lowest breathing
resistance of any axygen breathing equipment. Easy to useno adjustments of any
kind. No special training needed.



For "Where to Buy" Information, See List of Scott Distributors at Left of Page.



## SCOTT AVIATION CORP.

211 ERIE ST., LANCASTER, N. Y.

CANADA: SAFETY SUPPLY CO BRANCHES IN ALL PRINCIPAL CITIES
EXPORT SOUTHERN OXYGEN CO. 157 Chamber St., New York 7, N.Y.

#### CANADA

Safety Supply Co. Branches:
MONTREAL, QUEBEC EDMONTON, ALBERTA
HALIFAX, NOVA SCOTIA OTTAWA, ONTARIO
VANCOUVER, B. C. WINNIPEG, MANITOBA

SEE THE SCOTT AIR-PAK AND SCOTT DEMAND INHALATOR ON DISPLAY AT THE NATIONAL SAFETY CONGRESS—HOTEL STEVENS BOOTH NO. 21

# ETRACTION-ACTION



# FLOORSAFE

FLOORSAFE is a new discovery

FLOORSAFE

is "everything" in one product

If you are technically inclined, you will be interested to know that FLOORSAFE brings you a brand new application of synthetic resins. Its high coefficient of friction gives it built-in TRACTION-NOTTON .

FLOORSAFE with TRACTION-ACTION was developed, through years of research in the MYCO laboratories, to bring industry and business a new, higher standard of floor safety. It offers all these important benefits in one quick-drying, easy-to-use floor dressing:

- . SUPERIOR ANTI-SLIP PROPERTIES
- GLEAMING, MIRROR-GLOSS FINISH
- . SCUFF-RESISTANCE AND LONGER WEAR
- . LOWER FLOOR-MAINTE-NANCE COSTS

Call or Write for our Free Pamphlet on Floorsafe

### Other MYCO Products Listed



#### MASURY-YOUNG COMPANY Dept. 16 BOSTON, MASS.

76 ROLAND STREET

NEW YORK LOS ANGELES SAN FRANCISCO

11 West 42nd St. 10 South LaSalle St. 440 Seaton St. 465 California St.

KANSAS CITY DETROIT MINNEAPOLIS 253 Plymouth Building PORTLAND, ORE. JACKSONVILLE, FLA. P. O. Box 3412

950 Dierks Building 424 Book Building 2319 N. E. B'way

"MYCO means MORE for Your Money — More Value — More Service — More Satisfaction"

# On the job protection in after-hours



S-4250 Medium weight brown dres oxford with medallion toe Leather sole. Rubber heel.

5-4360

Comfortable blucher in rich

Comfortable blucher in rich brown. Fully leather lined. New "Winguard 400" steel safety toe box. Extra heavy leather sole. Rubber heel.

Here are four smart reasons why men willingly wear Thom McAn safety shoes. These are the popular street styles they're proud to wear... with the built-in protection they need for rugged jobs.

Men are already sold on the name Thom McAn. They've learned to expect good looks, all-day comfort and extra wearability from their regular Thom McAns, so they know they'll get these features in Thom McAn safety shoes, too.

You'll be doing them a favor - and helping to keep safety records safe at the same time-when you make Thom McAn safety shoes available to your men.

Don't forget to see us at Booth #118 at the National Safety Show.



### 5-4370

Rich cordovan color, moc casin type. New "Winguard 400" steel safety toe box with rugged leather sole and rubber heel.

### SOLD 2 WAYS

1. Stocked for your men in Thom McAn stores. 2. Sold direct to plants.

Details of this service, plus information on the 4-way employee purchase plan, and the Thom McAn safety shoe features, should all be on your desk. Just write us and we'll see that they get there.

THOM MCAN SAFETY SHOE DIVISION 25 West 43rd Street, New York 18, N. Y.



A DIVISION OF MELVILLE SHOE CORPORATION



# FIRST CHOICE FOR Safe Footing!



Whichever you select—Ferrox, Fera-Mat or Feralun—you can be sure of getting a top-quality, economical safety flooring. Each is first choice of thousands of users. Each is designed to suit particular job requirements. Here are the facts in capsule form:

## FERROX

Just open the can and trowel it on. Provides nonslip grip . . resists oil, chemicals and weather conditions. Excellent for machine areas and uneven surfaces. Ferrox gives economical coverage, 40 square feet to gallon . . costs 1/3 as much as fabric-backed floor coverings.



Fera-Mat covers large floor areas in a hurry. It peels like adhesive tape, goes down fast and stays safe!

Long life is assured through resin bonding agent and diamond-hard mineral granules. Fera-Mat's and diamond-hard mineral granules fatigue.



### -ED ALUN

For the toughest jobs, architects, safety engineers and building owners turn to Feralun. These durable treads, plates and thresholds, made of cast iron able treads, plates and thresholds, made in the walkmatrix, have a diamond-hard abrasive in the walking surface. Feralun is low in overall cost because it lasts the life of the building.

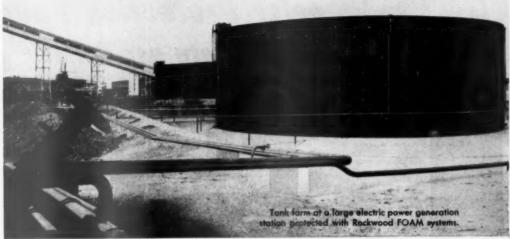
Don't Slip Up On Safety!

### SEND TODAY

FOR AMERICAN ABRASIVE'S FACT FOLDER ON SAFETY FLOORINGS

AMERICAN Safety Floorings

AMERICAN ABRASIVE METALS CO., 460 COIT ST., IRVINGTON 11, N. J.





## etter FIRE PROTECTION begins with OCKWOOD PRODUCTS

You'll be surprised at all the places in your refinery plant or city where Rockwood fire fighting products can help you cut fire losses.

Year after year Rockwood engineers stride ahead giving fire fighters spectacular new developments to combat serious fires in highly volatile flammable liquids and materials. One of the most recent developments has been the new Rockwood Double strength FOAM liquid. This new type extinguishing agent is a fast-flowing FOAM that covers burning surfaces faster — completely seals off combustible vapors — flows freely at sub-zero temperatures (-15°F) and is easier for firemen to handle. It will cling to smooth, vertical or curved surfaces and has many advantages over ordinary FOAM liquids or powder foams.

New Rockwood proportioning equipment, FOAM and Fog-FOAM Nozzles enables fire fighters to apply Rockwood FOAM Liquid and wetting agent more efficiently to most fires.

> Asl your fire equipment distributor, today for complete data and prices on Rockwood's growing family of modern fire fighting products.

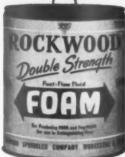
> See our display of modern fire fighting tools and chemicals at the National Safety Congress and Exposition Show, Chicago, Ill., Oct. 8 to 12. Booth Number 3.

### ROCKWOOD SPRINKLER CO.

72 HARLOW STREET, WORCESTER 5, MASS.

PORTABLE FIRE PROTECTION DIV.

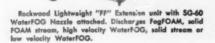




New Lightweight type FFF Rock-wood FogFOAM Nozzle. Discharges FogFOAM - solid FOAM stream or High Velocity Water-FOG



Rockwood FOAM Eductor can be attached between discharge of fire truck and hose line or between hydrant and hose line or between two





# Wheeler Protection Pays more safety per dollar



### APRONS

Bib, split-leg, waist, and V-types. All sizes available in U.G. as-bestos, flame-proofed duck, fiberglas, chrome leather, and perma-proof cloth,



herr., light basket, heavy basket,

and herr. weaves; flame-proofed duck and jean cloth; chrome lea., permaproof cloth, and wool. Coats 30", 44", and 50" lengths, cut to chest size, with "free-swing ragian sleeves. Pants to match, cut to waist size.





### ARM PROTECTORS

Chrome leather, or wool. Plain or steel studded leather reinforcements. Fastens on arm with three adjustable straps, or with zippers.



HELMETS

CLOTHING

U.G. light basket weave asbestos, with wire, fiber, or "hard boiled" head frames, all having adjust-able, padded head bands. Screened, and pyrex glass vision pieces; for head, neck and shoulder protection. Large selection of styles featuring exclusive Wheeler





### **ASBESTOS FIREMEN**

U.G. light basket weave asbestos. Six styles offered in one, three, and five piece suits. Each style neatly packed in handy metal carrying case. Used for fighting fires, fire rescue work, and emergency repairs.



### LEGGINGS

U.G. asbestos, flame-proofed duck, or chrome leather. Available in either Patented Leg-Safe style (as shown), or Spring Knee style. On and off in a jiffy! Half Leggings, and Hip Leggings, also obtainable.





### BLANKETS AND CURTAINS

U.G. asbestos, flame-proofed duck and jean cloth, fiberglas, permatype. Chrome lea, with proof cloth, and 100% reprocess- backing on some styles. ed wool. 6' x 6' standard size, packed in carrying case. Other sizes cut to order. Grommets supplied on curtains as specified.



### **SLEEVES**

U.G. asbestos, flame-proofed duck, fiberglas, chrome leather, and permaproof cloth. 12", 18", and 24" lengths.





### CAPES AND SLEEVES

With or without bibs. Made in chrome leather for Welder's. Also available in U.G. heavy basket weave asbestos. Small, medium, and large sizes.



SPATS

TENS Reg. thumb, rev. b. or one-finger styles. U.G. asbestos, flame-proofed herr, ab. III. d. d. duck, and chrome leather. Have on lea, rein. Double, & adjustable ankle and instep streps.





CONSULT A WHEELER DISTRIBUTOR FOR REAL SAFETY SERVICE

PROTECTIVE APPAREL, INC. . CHICAGO 10 ILL 224 W. HURON ST



# STYLE AND COMFORT, TOO!

### A FEW OF THE MORE POPULAR MODELS SHOWN HERE

When you stock Iron Age safety shoes your workers gain both foot protection and foot comfort. Further, you gain greater coverage through their eye-appealing styling that breaks down sales resistance to the safety shoe idea. You can offer your employees no better made steel toe safety shoes; none that will wear longer. And on the foot, Iron Age shoes always feel as good as they look. The cost is no more than ordinary safety shoes, so why not act today? Ask your Iron Age representative to survey your operations. He will gladly recommend the stock order that will best serve your safety program; the styles that will sell best to those who wear them.

### WOMEN'S SAFETY OXFORD

No. Widths A-D
Sizes 4-10 Widths A-D
Sizes 4-10 Widths around
This smartly styled moccasin ox
This smartly styled moccasin ox
this smartly styled moccasin ox
fold is just want. It's built around
fold is just has soft.

No. 614 Sizes 5-12 Widths A-E

A high style man's maccasin bold decorative stitching. La No. 92) Sizes 5-14

Widths A-EEE
One of many Saftopedic
A man's brown

No. 637 Sizes 6-12 Widths B-E

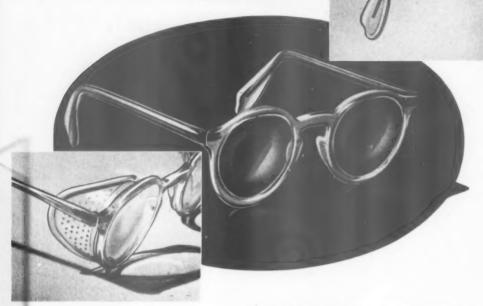
A 10" high engineer's bewith Neo-Cord sole and brass nails. Has steel to shank and the providering

Iron Age

The Salety Shee.

POR AGE DIVISION N. CHILDS A CO., INC. PHYSBURON 22, PA.

# the *Newest Thing* in EYE PROTECTION



### other Kimball Safety Products

### EYE PROTECTION:

Spectacle Goggles, Welding Goggles, Composition Goggles, Sideshields.

### HAND PROTECTION:

GLOVES: Welder's, Asbestos, Steel Stitched. MITTENS: Welder's, Asbestos, Steel Stitched.

#### BODY PROTECTION:

CLOTHING: Wool, Flame-Proofed Cotton. LEGGINS and SPATS: Leather, Ashestos, Flame-Proofed Cotton.

#### APROKS:

Leather, Asbestos, Flame-Proofed Cotton.

The new Kimball AC-2-A Safety Goggle with flesh-colored cellulose acetate butyrate frames having a wide skull temple with flared tip. Sturdy, neat, light-weight and comfortable, these new Kimball Safety Goggles hold their shape and are made of slow-burning material for added safety. A choice of either skull bow or riding bow temple.

Equipped with 6.00 Dioptre curved lenses, either clear or Kim tinted. Prescription ground if desired. Made in three lens sizes—40 x 43, 42 x 45, or 45 x 48, and five nose bridge widths—18, 20, 22, 24 and 26.

Also available with safety side shields in Model AC-23-A.



SAFETY PRODUCTS COMPANY

9310 WADE PARK AVENUE CLEVELAND 6, OHIO BOOTH NO 140-STEVENS HOTEL

# DOCKSON PROTECTION Saves You Money

DOCKSON Goggles, Face Shields and Helmets are "Built for Better Service" and GREATER ECONOMY in three ways:

- 1. COMFORT Your operators will wear Dockson equipment (and save you costly injuries) because it minimizes fatigue and discomfort.
  - 2. PROTECTION Dockson equipment is engineered to the hazard and the job. Visibility, stability and strength, all to the security-plus degree, have been built into this up-to-the-minute protection to save injury costs.
    - 3. DURABILITY Save replacement costs with DOCKSON equipment. Materials that stand the gaff longer, assemblies that operate dependably longer, all extend the hours of better service

THERE IS A DOCKSON DISTRIBUTOR NEAR YOU - NAME ON REQUEST.

Write us today for complete catalog of Dockson Head and Eye Protection.



GOGGLES of the finest construction in specific m els for all hazards: sparks, flying particles, dust, ch ical splash, intense glare, injurious infra-red or ul violet rays . . . each Built for Better Service.



FACE SHIELDS in a full range of models for specific or general use. Each provides just the right coverage and construction for a good margin of safety with the lightest weight.



HELMETS and HAND SHIELDS in specific models meet any requirement for work or inspection. Tough, lasting construction minimizes weight, increases convenience and assures full protection.

DETROIT 8. MICHIGAN

### PAX FAN MAIL

Few skin cleansers have received such wide spontaneous user acceptance—letters asking about PAX-LANO-SAV\* HEAVY DUTY come from all parts of the United States, some foreign countries and from all classes of people and industries. The letter reproduced below is typical of those received daily.

July 11, 1951

G. H. Packwood Mfg. Co., 1545 Tower Grove Ave., St. Louis (10) Mo., U. S. A.

Att: Sales Dept.

Gentlemen:

As an electrician working in many states on big industrial jobs I have had many occasions to use your PAX-LANO-SAV HEAVY DUTY Granulated Hand Cleaner. Many of my local No. 3, New York, International Brotherhood of Electrical Workers, also have used it. We all agree it is the best hand cleaner we have ever used.

However we have been unable to buy it in any stores here.

Would you please advise me where in Brooklyn or New York that we might be able to buy the 5-pound packages at retail.

Very truly yours,

(Signed) Robert J. Chisholm

PAX

The Pax trademark symbolizes a deep-rooted tradition of superlative quality maintained through a quarter century of continuous research and development.

The Committee on Cosmetics of the American Medical Association has accepted PAX-LANO-SAV\* Heavy Duty Granulated 3kin Cleanser for inclusion in its list of accepted products, and the Committee has granted permission to use its official Seal of Acceptance in accordance with the "Decisions of General Interest of the Official Rules."



G. H. PACKWOOD MANUFACTURING CO. 1545-55 TOWER GROVE AVE. • ST. LOUIS 10, MO.

Manufacturing Chemists To Industry

Granulated Skin Cleansers, Skin Cleansing Creams, Degreasers and Detergent Compounds

\*Trademark of G. H. Packwood Mfg. Co.

# FIFRE ALLOY

SLING CHAINS

# None better...after 20 years still America's First and Safest

Men who buy and use sling chains are influenced only by facts gained through experience. HERS-ALLOY Sling Chain prefere to by Safety Directors and Production Executives has been built up over the years not by what we claim, but by what HERC-ALLOY has done on the job.

To know more about HERC-ALLOY Slim Chains write for Data Book No. 3 which contain useful selection and application information.

### COLUMBUS MCKINNON CHAIN CORPORATION

(Affiliated with Chisholm-Moore Heist Corp.)

District Officers New York - Chicago - Cloveland

Other Factories et Angela, N. Y., Dixen, III., St. Catherines, Ont., Con.



# SUREFOOTED as a fly (almost)

Each of the four soles shown, will REDUCE ACCIDENTS caused by slipping, and give extra long wear. Nearly all safety and work shoe manufacturers supply footwear with these soles.

See us in Chicago Oct. 8th to Oct. 12th in Booth No. 120



### Mr. SAFETY ENGINEER

Will you assist in a research program to obtain data on the proper sole to wear on a particular job? If so, let us know of any condition that is wrecking shoe soles or where footing is hazardous. We will cooperate with you, at no cost to your company, in determining what type of sole will be the safest and wear the longest.



### **NEO-CORD**

A fine cord and neoprene sole that 'is resistant to oil, grease, gasoline, acids, caustics and heat. Cord construction gives NEO-CORDS a high non-slip efficiency for the life of the sole.



### GRO-CORK

The finest cork and rubber sole. They are lightweight, waterproof and very slip-resistant. GRO-CORK soles won't pick up metal chips, they protect the feet from heat or cold, and are soft to walk on.



### **NEO-CORK**

An outstanding cork and neoprene sole that gives long non-slip wear. NEO-CORKS resist gasoline, oil, grease, acids and caustics. They won't pick up metal chips, are waterproof and cushion the feet.

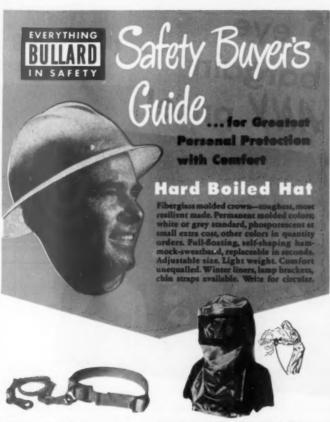


### GRO-CORD

This remarkable sole, with its cordon-end construction, affords nonslip footing and extra long wear. GRO-CORD soles should not be worn where grease, oil or gasoline saturates the footing.

GRO-CORD RUBBER CO., Lima, Ohio

Canadian Plant GRO-CORD RUBBER CO. of CANADA LTD., Tillsonburg, Ontario



### BULLARD SAFETY BELTS

Famous Morenci light weight design with extra safety margin. Continuous strand, super-twist webbing. No belt holes or grommets. Snub buckle. Adjustable keepers. Design adapted to belts for mining, construction, marine, petroleum and general industrial use; also in harness and saddle types. New brochure available.

### DUST and SPRAY HOODS

Air supplied or respirator types. Featherweight, tough, translucent material. Easy to clean. Full-vision, impact-resistant plastic face pieces are quickly replaceable. Airline Hood has non-fogging, no draft features; Cal. Div. Ind. Safety approved. Respirator hoods incorporate U. S. B. M. approved respirators. Other hoods approved for shot and sandblasting; Acid Hood for safe acid handling. Write for circular.



### FIRST AID KITS

Cylindrical kit ideal for use indoors or out; mount on trucks, boats, poles, walls—wherever first aid kits are required. Compact, waterproc. Contains fabric Roll-up, complete with Unit Packets of first aid materials. Other kits include full line of weatherproof and bulk package kits, Pocket Packet and Combination Belt Kits.

Wouldn't you like to receive regularly the pocketsize publication, "What's New in Safety?" It gives highlights of new safety products. Just say "add my name to your mailing list."

DISTRIBUTORS IM PRINCIPAL CITIES
Write for detailed product literature or see your Bullard
distributor or dealer

E. D. Bullard Company

Visit National Safety Congress. On display, seven standard permanent, molded colors in glass HARD BOILED hats and No price increase.

a GLASS eye
is no bargain
at ANY price!



"An eye for an eye" is a poor exchange. Especially if you do the trading, and give one of your own for a glass imitation.

The foregoing is reprinted from another of the graphic series of educational pieces in poster and pamphlet form designed by Bausch & Lomb to help sell your workers on a desire to use safety glasses.

Let this material help you with your present eye safety program. It's part of the total service offered by this pioneer in industrial eyewear.

Ask your distributor's representative to show you the kit of posters, pay envelope inserts, PA system scripts and other material that sells workers forcefully on desire to use proper safety eyewear.

2 SAFETY GLASSES FOR EACH JOB A complete range of Bausch & Lomb safety eyewear, engineered to meet the most rigid tests for each job classification in your plant.

**3** PROTECTION PLUS CORRECTION For at least 50% of your workers prescription lenses are necessary to working efficiency as well as to safety. Your B&L distributor offers prompt prescription service on all types of industrial eyewear.

Write Bausch & Lomb Optical Company, 681-10 St. Paul St., Rochester 2, New York.

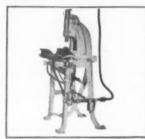


BAUSCH & LOMB C Tafety Cyewear

### Airways to Greater Safety via Schrader



Air Ejection Sets — can increase safety of hand fed machines 50%. The combination of Schrader Air Ejection Sets and Schrader Pawer Press Controls can make the machine practically foolproof.

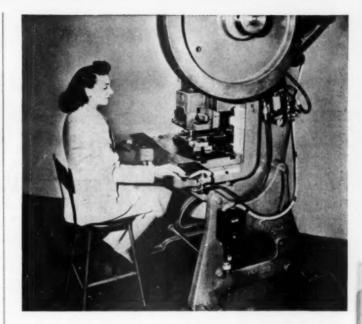


Kick Press Centrals—eliminate fatigue by substituting more efficient air power for foot power. There is a Schrader pneumatic control for hand operation, foot operation or both.



Blow Guns—are safer if you use a Schrader gun equipped with an adjustable tip. With this tip the flow can be controlled, avoiding the "full blas" that often results in serious eye injuries.

Air Cylinders \* Operating Valves \*
Press & Shear Controls \* Air Ejection Sets \* Blow Guns \* Air Line
Couplers \* Air Hose & Fittings \*
Hose Reels \* Pressure Regulators &
Oilers \* Air Strainers \* Hydraulic
Gauges \* Uniflare Tube Fittings



# Keep hands out of danger zone with this TWO HAND press control

### Control becomes inoperative when either hand operating valve is tied down

Here is a power press control that is definitely a two-hand device. A special cutout valve eliminates the possibility of tying down either hand operating valve to obtain one-hand operation.

After the work is placed in the machine the operator must depress both hand operating levers at the same time for the machine to operate. This means that the hands, both of them, must move out of the danger zone in order to operate the levers.

No longer is it necessary to resort to

mechanical monstrosities to make power press operation safer. And with the Schrader Control no effort is necessary to operate the levers. A light touch does the work.

Wherever there is a power press, there is an opportunity to increase safety by installing a Schrader Control.

Ask us to help you determine what will best fit your needs. Send us a letter outlining your particular installation requirement, your idea, or fill out the coupon below.

Variations of thir control can be applied to most any type machine for greater 'safety, and increased production.

Mail this Coupon Today

Schrader	A. SCHRADER'S SON Division of Scovill Manufacturing Company, Incorporated 452 Vanderbilt Avenue, Brooklyn, N. Y., Dept. R-1 Please send me further information on		
PRODUCTS	Power Press Controls Kick Press Controls	☐ Air Ejection ☐ Blew Guns	
CONTROL THE AIR	Cempany	Time	
	City	Zone State	

# Safe Footing-at Every Job Level!



# with "TROUBLE SAVER" SECTIONAL STEEL ROLLING SCAFFOLDS



- 1. STRONG, SAFEI "Trouble Saver" saves you the money that faulty scaffolding costs in accidents.
- QUICKLY ERECTED! Prefabricated—
   all parts are interchangeable. No
  time is lost in fitting parts.
- 3. EASILY DISMANTLES! "Trouble Saver" reduces excessive man hours required to take down oldstyle scaffolding.
- 4. LIGHT, COMPACTI Storage is easy.
  "Trouble Saver" requires less space
  than bulky, out-dated scaffolding.
- LONG LASTING! "Trouble Saver" components may be used indefinitely and save the cost of new scaffolding material on every job.

"Trouble Saver" makes ideal rolling scaffolds for plant maintenance work. At left is a Sectional Rolling Scaffold erected from 5'-wide ladder type frames. At right, a 24"-wide ladder scaffold. Extension bases, 3', 4' or 5' wide are available for ladder scaffolds, when working at greater heights.

See Our Exhibit

NATIONAL SAFETY CONGRESS
HOTEL STEVENS, CHICAGO
OCTOBER 8 to 12
BOOTH 97

ADJUSTABLE STEEL TRESTLES

- Strong!
- Safe!
- Economical!



Details
al the
quickly
adjustable
'Trouble Saver'
Steel Trouble



Manufacturers of "Trouble Savers" since 1912

THE STEEL SCAFFOLDING CO., Inc.

856 Humboldt Street

Dept. NS

Brooklyn 22, New York

# 4 Scrubbing Operations into 1

with a COMBINATION SCRUBBER-VAC!

Here's a timely answer to the need for conserving manpower and reducing labor costs—a single cleaning unit that completely mechanizes scrubbing. A Combination Scrubber-Vac applies the cleanser, scrubs, rinses if required, and picks up (damp-dries the floor)—all in one operation! Maintenance men like this four-in-one feature; also the fact that the machine is self-propelled... has a positive clutch... new type of water valve that assures uniform flow of water... and powerful (quiet) vac for efficient pick-up.

The Scrubber-Vac shown at right, Model 213P, is designed for heavy duty scrubbing of large-area floors. This machine has a 26-inch brush spread, and cleans up to 8,750 sq. ft. per hour! (Powder dispenser is optional.) Finnell makes Scrubber-Vac Machines in a full range of sizes—for small, vast, and intermediate operations. From this complete line, you can choose the size that's exactly right for your job (no need to over-buy or under-buy). It's also good to know that you can lease or purchase a Scrubber-Vac, and that there's a Finnell man nearby to help train your maintenance operators in the proper use of the machine and to make periodic check-ups.

For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 2210 East Street. Elkhart. Indiana. Branch Offices in all principal cities of the United States and Canada. scrubs, rinses, and picks up — in ONE operation!

Oned for has a pur!

dd in ou

Applies cleanser,

Conserve Manpower with Completely Mechanized Scrubbing

FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines



BRANCHES IN ALL PRINCIPAL



PUT YOUR
SAFETY MESSAGES
IN YOUR
EMPLOYEES' POCKETS!

A Book Match Safety Campaign does not begin and end at the plant gates.

Your messages are constantly on the job.

They are seen at work . . . at home, away and at play.

When at the National Safety Congress be sure and stop at booth 16 and get all the facts. We'll be looking forward to seeing you.

BOOK MATCH ADVERTISING DEPT.
THE DIAMOND MATCH COMPANY
SPRINGFIELD, MASSACHUSETTS



# Dedicated to SAFEGUARDING INDUSTRY



### DAVIS GAS MASKS

Precision made to meet the most rigorous on-the-job requirements. There is a Davis mask for every protection need-each specifically designed to afford maximum protection, comfort, performance.

Send for Bulletin No. 513

### DAVIS

Recording Thermocouple Type Recording

### COMBUSTIBLE GAS ALARM SYSTEM

A package unit for the continuous protection of processes, plants, personnel. New, more accurate principle of gas analysis. Improved zero stability, "Fail-Safe" construction.

Write for Bulletin No. 11-86



A complete line of gas analyzers available for every problem.

Madel M-1

Send for Bulletin No. 1144 (Toxic Range) Send for Bulletin No. 1147 (Combustible Range)

### DAVIS

### PORTABLE VAPOTESTER

Ouick, dependable onthe-job analysis of combustible gases and vapors in both combustible and toxic range. Approved by Associated Factory Mutual Fire Insurance Companies and listed by Underwriters' Laboratories.

Write for Bulletin No. 320



See the Complete Davis Line at the SAFETY EXPOSITION FIRST AID

Holt Dressing (D Corton) System Tonnic Acid Jelly for Burns (Tonnoid)

Mon-lined Gouze Compress

GAS PROTECTION

GAS ANALYSIS 0-100% gas analyzer Gas Alarm Systems BOOTHS

HOTEL STEVENS CHICAGO, ILL. OCTOBER 8 to 12



DAVIS EMERGENCY EQUIPMENT CO., INC.

45 HALLECK STREET

NEWARK 4



# BRECK

### FOUR WAYS TO PROTECT SKIN FROM INDUSTRIAL DERMATITIS

BRECK pH7 PROTECTIVE CREAM protects the hands against harsh materials such as cutting compounds, printer's ink, lime, paint and tar. Easily applied, it can be removed with Breck Hand Cleaner or soap and water.

BRECK WATER RESISTANT CREAM guards against the action of water and water solutions. It forms a stable protective film over the skin and is effective for three or four hours.

BRECK HAND CLEANER helps to eliminate the use of harsh, gritty hand cleaners, turpentine and petroleum solvents. Because it is mild, yet effective Breck Hand Cleaner leaves the hands clean and soft.



BRECK WORK CREAM is used after exposure to degreasing materials. It substitutes fatty materials for the natural skin oils keeping hands soft and pliable.

A Breck Industrial Preparations Booklet is available upon request.

JOHN H BRECK INC - MANUFACTURING CHEMISTS - SPRINGFIELD 3 MASSACHUSETTS
NEW YORK - SAN FRANCISCO - OTTAWA CANADA



# G HILLS

### the Hydraoxated carnauba

### floor dressing that's extra safe all year 'round!



CETOX makes all floors super safe —especially throughout year's 30% inclement weather when the risk of slips and falls is greatest.

### Super safe—even under wet shoes

Normally, water underfoot acts as a lubricant. CETOX is extra safe under spilled or tracked in water. You simply won't slip, because

Listed by
UNDERWRITERS'
LABORATORIES, INC.
as anti-slip floor
treatment material.

Tested-approved by
YORK RESEARCH
for American Hotel
Association.

CETOX contains Carnauba with the slip hydraoxated out of it. No silicas, or abrasives added. It's hydraoxated super safe!

### Beautiful and safe

Self lustre CETOX makes floors dazzling bright. It is a wet mop proof tough wearing, dirt resisting, protective floor dressing that may readily be removed with the use of a mild detergent. In every way, CETOX is superior. For safety sake . . . put CETOX on your floors.

Write for complete information and name of your nearest distributor.



# Chemical Service of Baltimore HOWARD & WEST STREETS • BALTIMORE 30, MARYLAND

NEMBER OF NATIONAL SAFETY COUNCIL.

Booth No. 2, Congress Hotel, 1951 National Safety Congress

K-LENS-M

Anti-Jogging

LIQUID



Stops fogging and steaming of eyeglasses and goggles—glass or plastic.
Easily applied, K-LENS-M Anti-Fogging Liquid forms an invisible coating that resists formation of fog or moisture on lens surfaces... brings clear vision to eyeglass wearers under severe conditions of hot steaming vapors, freezing temperatures, humid summer heat, or body perspiration... overcomes hazards of fogged goggles... increases worker efficiency and safety.



ANTI-FOGGING STATION
[Attaches Securely to Cabinet]

FINGERTIP SPRAY PUMP (No Air Pressure Needed)

EASILY INSTALLED—SERVICED (Locked In by Cabinet Door)



Make your own test—
Order a sample bottle of K-LENS-M Anti-Fogging
Liquid complete with spray pump, \$2.00 postpaid.

Manufacturers of K-LENS-I

Liquid Lens Cleaner Lint-Free Lens Tissues Anti-Fogging Liquid Dispenser Cabinets Anti-Fogging Station

THE WILKINS CO.

# 'PAC-KIT' FIRST AID

MODERN UNIT TYPE FIRST AID EQUIPMENT FOR EVERY EMERGENCY



Provides standard products each packed in individual cartons with illustrated First Aid Instructions.

Electrically welded 20 gauge steel, dust and moistureproof cases provide complete protection of contents, give long service. No. 748 SNAKE BITE SUCTION FIRST AID



Easily operated with one hand. ANY-ONE can give effective first aid. KIT CONTAINS: Tourniquet, Lancet and Suction Syringe, with

- I Curved Rubber Suction Cup
- I Large Rubber Suction Cup
- 3 Iodine Applicators
- 3 Ammonia Inhalants
- 3 Adhesive Bandages

Wt. complete in metal case, 7 ozs.

SUPPLIED IN

SOL NO COLUMN OF TURES

PAC-ET REFILL UNITS

PAC-ET REFILL UNITS

PAC-ET REFILL UNITS

PAC-ET REFILL UNITS

FIRE, ELECTRICAL, WELDING,

FIRE, ELECTRICAL, WELDING, STEAM AND FRICTION BURNS.

Scalds—Sunburn—Windburn
P-K BURN OINTMENT provides
immediate and sustained relief. It
is a soft Lanoline base cream with
an effective analgesic. Liberal free
sample on request.

VISIT OUR EXHIBIT BOOTH NO. 15 IN THE CONGRESS HOTEL NATIONAL SAFETY CONGRESS, CHICAGO, OCTOBER 8-12.

Write for descriptive literature and prices.

THE PAC-KIT COMPANY

P.O. BOX 1306 GREENWICH, CONN. MAINTENANCE determines the

USE THE **MULTI-CLEAN** METHOD



MULTI-CLEAN LIQUID FLOOR CHEMICALS



MULTI-CLEAN FLOOR MACHINES



MULTI-CLEAN ELECTRIC MOPPER.



MULTI-CLEAN ALL-PURPOSE RUG AND FLOOR SCRUBBER

FORD PARKWAY



### The MULTI-CLEAN METHOD is a planned program for every type of floor

Proper floor care demands that floors be safe as well as clean. Slip hazard is reduced when floors are maintained by the Multi-Clean Method-and they stay light, attractive and sanitary with far less attention

There's a Multi-Clean Method for every type of floor. The Multi-Clean Method is a carefully planned, thoroughly tested and proved procedure that recognizes the requirements and problems of each floor. It combines the use of Multi-Clean Liquid Floor Chemicals and Multi-Clean Floor Equipment to bring about easier maintenance, better appearance, and longer floor life. You save time and labor by the Multi-Clean Method-developed by floor specialists to make maintenance easier and more effective.

### FREE MAINTENANCE MANUAL



SEE US AT

NATIONAL

SAFETY

CONGRESS, OCT. 8-12 Booths 25-26

CONGRESS HOTEL

Multi-Clean has prepared a complete series of floor maintenance manuals answering every floor problem. Write today and name your type of floor use the coupon below for a free copy of the manual pertaining to your floor.

	2277 F	ord Par	kway	51	. Pau	1 1, Minn.	
Gentlemen:	Please	send i	а сору	of your	free	mointenance	m
for			floor	s (indica	te ty	pe of floor).	

Address. City.

State

IC., Dept. NS-10

# S Linemen's Choice











Orip Pliers perfect







CONTAINERS AND LIGHTS

M. BASHLIN COMPANY GROVE CITY 3. PA.

### OILY WASTE CANS



for old rags or combustionable material, Underwriters approved.

From 6 to 25 gallons.

### SAFETY CANS



for easy handling of flammable liquids. Underwriters labeled. In 1

pint to 5 gatlon sizes.

### DISPENSING PLUNGER CANS

cleaning with flammable liquids. In 1 quart, 1/2 gallon and 1 gallon sizes. Ap-



(#1717-S) - for use

in group D, class

1 hazardous loca-

tions. Fully insu-

lated. Underwrit-

ers Lab. approved.

proved by Factory Mutuals SAFETY FLASHLIGHT

### SAFETY EXTENSION

(#1727-5) - for safe inspection of storage or operating equipment 15" or 30"

extensions for lighting inaccessible areas. Underwriters approved.

### LIGHT





(#2144-5) 6 volt for use in hazardous locations. Wire quard and stand. Safety kick-

out bulb sockets. U.L. approved.

YOU - as the man directly responsible for the working safety of your personnel and equipment are asked to consider the safety features of Justrite equipment. These products have been designed. constructed and tested to meet the highest standards of industries everywhere. Used for inspecting, cleaning or storing . . . Justrite Containers and Justrite Portable Lights discourage sparks or explosions - wherever flammable liquids, vapors, or gases are present.

Besides this safety factor, your decision to use Justrite equipment will prove sound because Justrite outperforms - and outlasts - all other similar equipment regardless of price.

ORDER FROM YOUR JOBBER

for free catalog write Dept. NSN.



### SAFETY HEADLIGHT

(#1904-S) - with belt clip for case and padded headband for light. Fully flexible with 1,500 ft. beam. Leaves both hands free.

MANUFACTURING CO. 2061 N. SOUTHPORT AVE., CHICAGO 14, ILL

# Prevent Static Electricity EXPLOSIONS

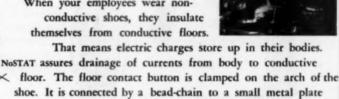
### ... SAVES THE EXPENSE OF NEW FLOORING

Make your floors safely conductive with CONDUCOTE coating. It overcomes danger from friction sparks that can wreck your building. Effective on nearly all types of flooring. Applied with a brush to approximately 1/16" thickness, this conductive composition dries to a smooth, long-wearing, seamless surface. Minimizes explosion hazards by dispersing static. Complete the job with CONDUCOTE finish. Available in black, grey, green, red or brown. Certified by Underwriters' Laboratories and Electrical Testing Laboratories.

# **Guard Against the HUMAN SPARKS** that cause EXPLOSIONS!

## GROUNDING DEVICE FOR PERSONNEL

When your employees wear nonconductive shoes, they insulate

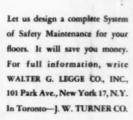


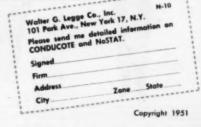
A heavy-duty NoSTAT also available for industry. Fill out and mail the coupon today

worn around the leg in an elastic garter. Light, comfortable

for full information.

for men or women. Floor button fits any size shoe.







Hospitals need CONDUCOTE



Industry needs CONDUCOTE



Laboratories need CONDUCOTE



# Why



#### OPEN END FINGER GUARD

Eliminate minor, but costly, finger injuries by using Steel-Grip finger guards on burring, grinding, buffing, sanding, assembly, machine and punch press operations. Choice of materiels. Sizes for men and women.

[U.S. Patents 2,351,906 and 2,461,872]



HAND PAD

Tough chrome leather; open back for coalness. Also made steel reinforced. Many styles of leather and asbestos hand pads for every job.



Shell-Grip chrome leather gauntlet glove. Reintered with steel ribbons over tough leather strips for maximum protection and wear on roe sh jobs. Also made with 2" band cuff and in leversible style.



Woven-Gard open end mitt. For lower temperature jobs where asbestos is not required. Highly oil absorbent. Resists cuts and abra sion. Coffiptete line of Woven-Gard hand spots arm guards, closed end mitts and oprons



Chrome leather wrap around legging. Easy en—easy eff. Also manufactured in asbestos and flameproofed duck, as well as spring type design in all materials.



Chrome leather welder's half jacket. Available In asbestos and flameproofed duck. Small, medium and large sizes. Extra large and jumbo on request. Complete line of welder's clothing, glaves and millers.



Chrome teather bib type opron. One-place construction—no seams. Made in asbestos and flameproofed duck. Choice of lengths in all materials; made plain or steel reinforced. We also manufacture a complete line of waist bree across.



Asbestos glove, 14" length. Underwriter's 2½ lb. per sq. yd. abbestos with fough chrome leather cainforcement over entire polm, face of all fingers, around entire forefinger and thumb, well acround small finger. Thumb seam entirely away from warring zone. Pull fine of creating and the control of the contr

# INDUSTRIAL Safeguards?

Why do experienced, competent Safety Directors insist on Industrial's Steel-Grip Safeguards? Because the quality of Steel-Grip safety apparel assures proper protection, long economical wear and satisfied workmen.

Savings are not made at the expense of quality. Steel-Grip safety apparel is made from the correct weight, type and character of materials to protect the workman from the various hazards in industry.

The designing and manufacturing of Industrial's complete line of safety apparel is done by trained, skilled, upgraded craftsmen with this thought in mind... properly protect the workman at the lowest possible cost... not the cheapest.

Let us help you solve your safety problems with our more than 40 years of experience. Write for catalog. Describe your particular hazard. Try Industrial's Steel-Grip quality. You will learn why it pays to insist on the genuine.

### INDUSTRIAL GLOVES COMPANY

A CORPORATION

1742 Garfield Street, Danville, Illinois (In Canada: Safety Supply Co., Toronto)

Famous Industrial Safeguards Since 1910





HILLYARD'S Sensational Seal!

### GUESS AND WORK OUT OF TAKES THE RESILIENT FLOOR CARE!

### The Low Cost Protection You've Been Wanting for Floors

- one coat takes the place of many expensive fincomplete protection against water, dirt, grease.
  tremendous coverage (1,500 sq. ft. on some
- brings to life colors which have become dull or faded. Won't soften or bleed colors.
- saves maintenance time.
   resists deterioration from spillage as alcohol, gas-
- oline, mineral spirits, paraffin oil.

  is not harmed by acid or alkaline salts (present
- is not harmed by acid or alkaline salts (present in certain floorings), staves off obsolesence of floor. Hil-Tex is highly resistant to ozone or fading action of Utra Violet Light.

  SAFETY MEN APPROVE IT ... with an "anti-slip" coefficient of friction 50% greater than minimum insurance requirements (non-flammable) (11/L)
- FLOORING CONTRACTORS RECOMMEND IT contains no solvents, caustic, acids, other ingredients to injure or wear out sensitive surfaces. AINTENANCE MEN PRAISE IT . . keeps floors in A-1 condition at all times with only half the MAINTENANCE MEN PRAISE IT
- ARCHITECTS SPECIFY IT . . . for floors of greater beauty at a minimum cost to clients.
  RUBBER FLOORING MANUFACTURERS ASSOCIATION ENDORSE IT . . .

SEE OUR CATALOGUE See for Yourself what HIL-TEX can do! On Your Staff Not your payroll! HANDLE WITH

HILLYARD CHEMICAL CO., St. Joseph, M. 

CARE

At last! A seal to ease maintenance, prolong life of asphalt tile, rubber tile, all floors of a porous or semi-porous nature (including terrazzo and cement. with the exception of wood). HIL-TEX fills pores and hair cracks to provide a smooth even surface, preparing a bond between the floor and the surface treatment.

HIL-TEX has been thoroughly tested "ON THE FLOOR" IN HOSPITALS, SCHOOLS, INSTITUTIONS, INDUSTRIAL AND COM-MERCIAL BUILDINGS!

	AA A III	THIC	COLLBONI	PREE -
=	MAIL	11113	COUPON:	DEMONSTRATION -

	Hillyard Chemical Company, Dept. U-10 St. Joseph, Missouri
3	Please arrange for a FREE HIL-TEX demonstration on a
	☐ Send me all the facts about HIL-TEX.

Institution

Address

City State

201 SR 100

# TM

# Alloy Steel

CHAINS

DO MORE WORK, LAST LONGER,

COST LESS . . . THAN WROUGHT IRON TYPES



Your chain problems are substantially reduced when you buy TM Alloy Steel Chain. Records prove this famous chain outlasts and outperforms wrought iron types..even under the toughest conditions. It's more economical too!

TM Alloy Steel Chain has twice the tensile strength. Controlled heat-treatment assures a uniform hardness of from 265 to 285 Brinell. These features make it highly resistant to abrasion, coldworking, grain growth and shock at all temperatures. Send coupon today for complete details.

S. G. TAYLOR CHAIN CO.



S. G. TAYLOR CHAIN COMPANY Dept. 7, Hammond, Indiana

Rush literature and prices on TM Alloy Steel Chains.

NAME.

ADDRESS

Taylor Made

Chain SINCE 1873

# Use Protectoseal Safeguards ALL THROUGH the PLANT

# FOR COMPLETE PROTECTION FROM FIRE AND EXPLOSION HAZARDS OF FLAMMABLE LIQUIDS

Your plant's fire and explosion protection is like a chain: it's only as good as the weakest link. That is why it is important to protect your entire plant, not just the department with the highest danger potential. No matter how you use, dispense or store flammable liquids, there is Protectoseal equipment to help you do it safely.

I DANGER IN UNLOADING The escape of highly flammable vapors plus the threat of static electricity makes any fueling operation a constant hazard. Protectoreal Tank Car Fittings hold excessive vapor loss and resultant chance of explosion to a minimum. Compact, easy to handle, they fit all tank car dome openings.

Protectoseal Filling, Venting, and Sealing units safeguard and speed fueling. Some double for convenient rodding and sampling.

2 DANGER IN STORAGE YARD Volatility of flammables—
atmospheric changes—changing tank pressures—and surrounding fire demand specific time-tested vents and fittings.

Protectoseal produces a broad line of vents, seals, and flame arresters for conservation, condensing, and non-condensing purposes. Each provides adequate protection under severe conditions.

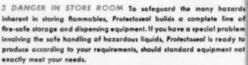


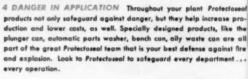














Send for the free Self-Checking Chart — helpful aid in analyzing fire and explosion hazards by tracing movement of flammables through various operations and departments of plant.





### The

### PROTECTOSEAL COMPANY



1928 SOUTH WESTERN AVENUE CHICAGO 8, ILLINOIS

### For Clear Safe Vision — Glass and Plastic



A necessity for effective safety-goggle K-LENS-M Lens Cleaning programs, Products have been standard equip ment in leading industries, business offices and government installations for over eleven years. K-LENS-M Lens Cleaning and Anti-Fogging Stations encourage workers to wear goggles by eliminating dirt and fog which hamper

K-LENS-M costs little . . . actually pays for itself in increased efficiency, greater accuracy and fewer accidents

Order test bottles of K-LENS-M Anti-Fogging Liquid and K-LENS-M Lens Cleaner, large size, complete with 2 spray pumps, for \$3.00 postpaid. Or write for free sample bottles.



The K-LENS-M Liquid Lens Cleaning and Anti-Fogging Station -the economical, efficient way to clear vision.

With K-LENS-M Lens Cleaning and Anti-Fogging Stations, your workers can have clear protected vision at all times. Whatever your plant conditions, employees won't have to remove goggles or shields because of dirt or fog-and risk loss of eyesight. Modernize your eye safety program with

K-LENS-M Liquid Lens Cleaner for thorough cleaning of glass or plastic eyewear.

K-LENS-M Anti-Fogging Liquid forms an invisible coating on glass or plastic lenses that resists formation of fog or moisture. K-LENS-M Dispenser Cabinet with Anti-Fogging Station is a

complete lens cleaning unit; easy to install, use and service.

Contact your safety equipment supplier or write direct to The WILKINS Co., INCORPORATED Cortland 1, N. Y.

### MAINTENANCE EQUIPME

for scrubbing and maintaining floors of all kinds and for scores of other dust control and clean-up jobs



SEE DEMONSTRATION of HILD EQUIPMENT in STEVENS HOTEL

HILD Equipment keeps factory floors clean, smooth and slip-safe . . . prevents accidents and speeds up plant traffic and improves employee morale. Special attachments re-move stubborn, hard-caked grease and dirt ...much faster than chipping off with hand spud. HILD Shower-feed Scrubbing and Vacuum Drying gets oily, slippery floors Vacuum Drying gets oily, slippery floors clean and dry . . . permits floors to be scrubbed during working hours without in terrupting production for more than 90 sceonds.

HILD FLOOR Scrub Availpictured without somewith or without somewith or without somewith or without somewith or with or with or with or with or without somewith or without somewith or with or with or with or without somewith or with or w



HILD Heavy Duty Vacuum . . . always ready for any clean-up job, wer or dry. Moisture in vacuum airstream cannot damage specially designed HILD Bi-Pess motor. Fifteen Bi-Pass motor. Fifteen easily interchangeable attechments. Two models . . . 10 or 40 gallon liquid capacity.



System ? MAINTENANCE

Write today for FREE CIRCULARS HILD FLOOR MACHINE CO.

740 W. WASHINGTON BLVD. Dept. NS10 Chicago 6, Ill.

Only HILD has the Patented

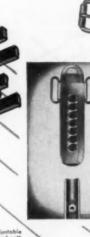
Shower-Feed Brush

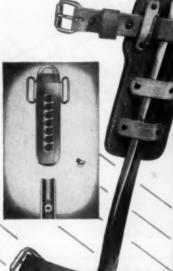
Diagram shows how scrubbing solution flows from tank on handle through accurately spaced holes penetrating the brush back between each rew of bristies. for fast thorough scrubbing with utmost comonly. Brushes available with fibre or steel-wire bristles.

# Miller CLIMBS TO TOP WITH NEW

# ADJUSTABLE CLIMBER

Booths 144 - 145 National Safety Congress





Free

At the National Safety Congress ask for Miller's souvenir Plier Grips.

Miller - - first in salety! Miller Safety Equipment is first with line men, first with power companies, and first with industrialists. Miller Safety Equipment is designed by safety men for safety men, and is field tested. All industries, as well as power companies from coast to coast, not only standardize on Miller Equipment, but send in their special problems for Miller safety engineers to solve with new equipment.

If you want to maintain a better safety record, write, wire or call Miller today!

for SAFETY see Miller FIRST

Miller EQUIPMENT CO., INC.

# SALISBURY'S PROTECTIVE EQUIPMENT



#### MAKES SAFETY SURE

Cautioning linemen against carelessness is important, but not enough. It takes dependable protective devices used on every job near energized equipment, to make safety sure.

There is a Salisbury Rubber Protective Device for every electrical hazard, dependable, convenient to use, proven on the line. That's why it's "Salisbury For Safety" where utility men have a hot line job to do.

> See Salisbury's products and new developments on display in Booth No. 90-91

#### PRODUCTS

Line Hose
Connector End Line Hose
Insulator Hoods
Blankert—3 Types
Snep—On Blankert
Snep—On Jackets
Blanker Clamp Pins
Rubber Gloves
Glove Protectors
Rubber Coloves
Glove Liners
Glove Bags

Rubber Sleeves Static Resisting Line Coats Lineman's Rubber Boots Lineman's Hets Lineman's Hets Insulating Stools Tool Bags Line Hose Bags Switchboard Rubber Matting Joint Bandages Cable Bandages Cable End Test Caps



#### W. H. SALISBURY & CO., INC.

401-21 No. Morgan Street

Chicago, Illinois

# **NEW FENDALL Cup-Type GOGGLES**

Offer Many Distinct Features and Advantages!



Safety Tested — Safety Proved — Fendall cup-type goggles are the finest ever offered. Safety directors will be quick to recognize the many PLUS features. For example, cups are individually molded to fit both right and left eye areas perfectly . . . comportably. Ventilated side shields circulate air

freely, yet banish foreign particles. Smooth, comfortable wide-bearing facial confact surfaces distribute weight evenly. Fressure-free fit forms a perfect seal against dangerous chips, etc. Available in Chipper, Welder, Dust and Splash, Transparent models. Investigate Fendall before you buy.

### FENDALL COMPANY



4631 N. WESTERN AVE. CHICAGO 25, ILLINOIS

# FACE SHIELDS



More comfort, more strength, clear vision, absolute safety, all built into every Fendall Face Shield. You can't find better. Workers wear them willingly. Ask for a sample shield. No obligation.



See The Complete Fendall Line

or the National Safety Congress

BOOTH 33

Congress Hotel, Chicago

# Sage-Weight Saluminum PRODUCTS

# ALUMINUM LADDERS

BRIGHT SPOT IN THE SAFETY WORLD

Here's that outstanding todder line you've heard safety mentalk about. Levisville products are designed for your heavy duty lobe and you get an extra measure of safety in their unique construction. Corrugated rungs are reinferced and then securely riveted to special extruded dissilinum side rails producing equipment with a solid resistance to rane leconomius or twisting. Naturally there's no dry ret or oplinters.

Louisville ladders will give you EXTEA years of service and can be a major factor in your plant safety program. We invite you to check the list of concerns who purchase our products.

You will find us at the Salaty Congress.

LOUISVILLE METAL PRODUCTS CO., 1101 W. OAK ST., LOUISVILLE 10, KY.

# STRAIGHTS EXTENSIONS 2 SECTION PLATFORMS BOOTH 22 — CONGRESS PLANKS STAGES PLANKS STAGES PLANKS STAGES ROLLING SCAFFOLDS ROLLING SCAFFOLDS ROLLING SCAFFOLDS

#### install SIGHT SAVER CLEANING STATIONS

Dirty eyeglasses, like dim lights and dull tools,

are dangerous and inefficient. Make clean glasses a habit in your plant and office by making it easy for your people to keep their glasses clean. Install Sight Saver Cleaning Stations. It will pay you to supply Sight Savers, the Dow Corning Silicone treated tissues with a world-wide reputation for being the best and the easiest way to clean, polish and protect eyeglasses and safety goggles. Let Sight Savers wipe

gway the best excuse men give for failing to wear safety glasses. Implement your eye safety program with Sight Saver Cleaning Stations.













DOW CORNING MIDLAND

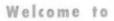


DOW CORNING CORPORATION MICHIGAN

Be sure and muit Booth 23 at the Safety Exposition, Congress Hotel, Chicago

# **NEW BOOTH - NEW PRODUCTS**

- but the same old friends!



BOOTH No. 20



We'll be looking for you: LARRY FOLEY, FLOY JENNINGS FRANK RODAK and ED BURKE

Everything for Industrial Safety

EQUIPMENT CORPORATION

644 Pacific St., Brooklyn 17, N. Y.

SAFETY

PULMOSAN

1831 Franklin Ave., St. Louis, Mo.







# AMERICA'S LARGEST LINE OF DRY CHEMICAL FIRE EQUIPMENT!



Fast Acting, Highly Effective Dry Chemical Fire Extinguishers From

2/2/bs. to 30/bs.

#### A LEADER IN DESIGN AND ENGINEERING

Safety First, a leader in design and engineering of fire fighting equipment, still leads the field with the largest, most versatile line of fast-acting, highly effective Hand Portable Dry Chemical Fire Extinguishers! This complete line of 9 powerful, sturdily-built sizes ranging from 2½ to 30 lbs., offers an extinguisher for any price or need. Available in the regular industrial type or the revolutionary pressurized Safe-T-Meter model with the exclusive visual gauge for on-the-spot inspection.

#### Dealers Invited

A few remaining choice territories still open to qualified dealers on an exclusive or non-exclusive basis. For further information write Safety First Products Corp., Dept. A, Elmsford, N. Y.

APE-T-METER

PEATURE

Approved Underwriters
Reting, Pressure George Tells
Status Of Extinguisher As
A Glence, Con Be Used
Intermittently, OnThe-Spet Refit-

afety First PRODUCTS CORP., ELMSFORD, N.Y.



# SAFETY FIRST WITH KLEINS

Over the years, there has been a tremendous advance in safety practice throughout all industry. Linesmen, electricians, workers everywhere have contributed to the safety measures that have resulted in today's excellent performance.

We are proud that the equipment produced by Mathias Klein & Sons has played a part in setting new safety standards. The general acceptance of Klein equipment today is the result of the quality that has been associated with the name Klein "since 1857."

This quality rests on the selection of the finest materials, the precise skill in every step in manufacture—the individual inspection and testing of every piece of equipment and by a continuing program of product improvement and development to assure maximum service, comfort and safety to the user.

Tour the Klein Plant See us at Booths 65 and 66 Stevens Motel October 8 to 12





SAFETY" MARKING TOOLS HELP PREVENT ACCIDENTS



SAFETY
Is Everybody's Business!

"Sefety" Wedge-Orip Type Holder



Make Marking Safe with "SAFETY" Tools!

200 East Carson Street

Pittsburgh 19, Pa.



# I KNOW I'M SAFE... with WOODEN SOLES!

See these and many other styles at Booth 115

#### FOR THE FACTORY ...

No. 300

REECE "HOT FOOT" SOLES strap on over any safety shoe. They are heatproof, E. Z. WALKING sole protection. Also made with tractor type wood sole for areater flexibility, our No. 580.



# For BROKEN FOOT BONES CRUSHED TOES SWOLLEN FEET



No. 175-CG—Men's
No. 173-CG—Women's

Keeps them on their feet—"on the job."
Wood sole acts as splint.
Guard is optional.



### ... FOR THE FOUNDRY

No. 504-5

REECE "ALL-PURPOSE" SAFETY SHOE
. . . strong steel toe. "PERFECT
ROCKER" WOOD SOLE durable leather uppers. Many other styles for unusually hazardous jobs.

REECE WOODEN SOLE

There is no substitute for Reace Wooden Soles

COLUMBUS, NEBRASKA

### Provide Maximum In SANITARY WASHING FACILITIES

#### FOR ALL EMPLOYEES, MEN AND WOMEN

Bradley Full Circle Washfountains serve 8 to 10 persons simultaneously—each with clean running water from central sprayhead. The standard in sanitary fixtures for over 30 years. With foot-control, water flow is cut off automatically when washers leave.

### NO FAUCETS TO TOUCH ...

Sanitary Bradleys are used throughout industry—in large and small plants. They provide maximum facilities in minimum space, reduce by 70% piping connections and cut water consumption. With foot-control there are no contacts with faucets so no chance of transmitting germs. The large bowl is self-lushing to prevent collection of used and contaminated water.

To save time and guard health, add Bradleys now. BRADLEY WASHFOUNTAIN CO., 2237 W. Michigan St., Milwaukee 1, Wis.





SEND FOR FREE CATALOG 4701.



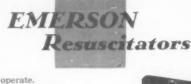
FOR SMALL WASHROOMS
MISTALL BRADLEY
MISTALL BRADLEY

Ideal for executive and clerical washrooms — in cafeteries, laboratories, work shops. Two persons served by sprayhead. Footonfrol prevents water



#### For FIRST AID

in breathing emergencies



For SECOND AID



Emerson Method of Artificial Respiration

SIMPLE to operate.

SAFE for adults, children, or infants.
Accepted by American Medical Association since 1942 for use by laymen.

PROVIDE SUCTION, alternating with pressure, to give vital aid to the circulation. Write for free Medical References on Resuscitation.

Emerson Besuscitators are for use only by professional or other adequately trained personnel and not intended for replace annually applied resuscitation tut to supplement it. Every policenan, firenan, and responsible factory worker should know what a resuscitator can do to save lives and how to operate it.



# J. H. EMERSON COMPANY

# Occupational Disease of Sentries and Watchmen

Despite the fear of Court Martial, every now and then a Sentry succumbs to the overpowering desire for sleep.

The same thing happens to unsupervised Watchmen—especially on long, dull weekends when the plant is closed. That's why the DETEX GUARDSMAN Watchclock is considered the greatest plant protection tool ever invented.

The GUARDSMAN operates on continuous roll tape, keeps a minute-

by-minute record of your Watchman's activities. If he sleeps, shirks or O CO

skips a round—it will surely show up in his alibiproof record.

Perhaps you are negligent about weekend supervision because it entails overtime pay for a supervisory employe to return to the plant and change the clock dial. Perhaps you have never given serious thought to the high incidence of fire, theft and vandalism on weekends.

The GUARDSMAN, with a 96-hour capacity, assures you peace-of-mind protection every day, whether your plant is working or idle. How can you afford NOT to have GUARDSMAN protection? Send for free folder today. Are you getting DO orders? Then you should be interested in our free manual "PLANT PROTECTION FOR NATIONAL DEFENSE." Write for your copy.





PATROL
ALERT
DETEX WATCHCLOCK CORPORATION
DOI: N-10
TWINIFEAN
TO VARICE STREET, New YORK 13, N. Y
GUARDSMAN Sales and Service in All Principal Cities

Be sure to see the DETEX Exhibit at the National Safety Show—Booth #32 —Congress Hotel.



# NEW! Introduced at the National Safety Show.



A few choice territories are still open for livewire distributors to industry. If interested, see Mr. C. E. Evans at Booth No. 11, Casino Room, Congress Hotel, during the Chicago Show.

# PHLO

A NEUTRAL Protective Cream by the Makers of PRACTI-KREME

PHLO, the low pH skin protector, is the new sister product of Practi-Kreme, nation's largest-selling skin protector and cleaner. It is the answer for workers who do not require Practi-Kreme's heavy duty dual protection. Women particularly appreciate its smooth-flowing texture, its handy personal-size tube container (3.12 Fl. Oz.).

Applied before exposure to coolants, cutting oils, cements, lacquers or solvents, PHLO conditions skin against dermatitis, a leading cause of absenteeism. It bars irritants from skin pores, excludes bacteria and soil, reduces fungus or bacterial infections.

The non-greasy, non-sticky feel of skin after applying PHLO attests the absence of fingermarks or harmful residues on objects handled. PHLO is a product you'll want to SEE, TRY, BUY!

## CHEMICAL SPECIALTIES, INC.

54 Waltham Avenue

Springfield 9, Mass.

# How Much is YOUR PLANT losing

# because of POOR VISION?

Accidents lessen production and increase spoilage—and poor vision is one of the most important contributing causes of accidents.

Now is the time to install a Keystone Occupational Visual Service. A sampling test, run on a group of your own employees, will show that a Visual Testing program will give you the results that thousand of plants are reporting.

LOWER production costs and training costs; lower labor turnover; less spoilage; reduced accidents and insurance rates.

INCREASED efficiency, larger profits; increased employee satisfaction.

Write for brochure "What You Can Expect from a Good Vision Program," by a prominent industrial personnel director.

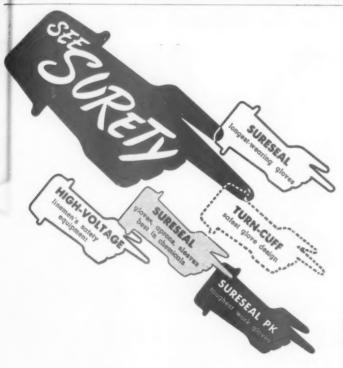
Visit Booth 150, National Safety Congress, Stevens Hotel

KEYSTONE VIEW COMPANY, Meadville, Penn. Established 1892. Originators of Binocular Vision Testing in Industry.

#### The KEYSTONE

Occupational Visual Service





#### BOOTH 54 STEVENS HOTEL

THE SURETY RUBBER COMPANY CARROLLTON, OHIO Dept. S



EASY TO USE ... Just put it on grease spots

ECONOMICAL... Saves time - Saves labor

Ideal for: . Restaurants . Taverns Machine Shops o Factories o Breweries Machine Stations and Pits Garages Service Stations and rits Varages

Repair Departments Power Plants

- \* Kitchens and Food Plants \* Elevator Pits

CHECK THESE ADVANTAGES 1 Reduces slipping hazards 2 Reduces fire Reduces suppling nazards Reduces tree hazards 3 Improves Roor conditions 4 Remuzurus maintenance labor costs 5 Reduces duces maintenance labor costs Reduces
insurance penalties Improves working coninsurance penalties improves working conditions permits safer, easier, faster walking dificis remits safer, easier, raster waiking on plant floors 8 Improves plant housekeeping

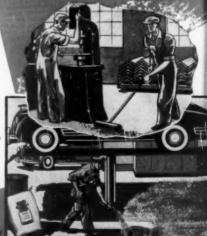
DONT PUT IT OFF --PUT IT ON! Booths No. 148-149, Stevens Hotel

ectored Exclusively by

Greases and fats from Floors



Absorbs all types of Oils, Greases and Fats plus



Oil-Dri Corporation OF 520 N. MICHIGAN AVE.



STONEHOUSE SIGNS
For Accident Prevention

MASY BE MASY
CORRESPUL
HELP US MAKE THIS
MAKE THIS
MAKE THIS
MAKE THIS

FIRE HOSE

SAFETY FIRST WEAR YOUR GOGGLES

OUT THIS DOOR KEPT CLOSED

WATESTEP YOUR STEP

DANGER DO NO LOCALIZATION OF THE PARTY OF TH Generally speaking

There are a lot of very helpful Stonehouse Signs known as "General Accident Prevention Signs."

Their wide use by industry is proof of how really useful and helpful they are. Some of them are "Danger" signs; others "Caution" signs; still others "Notice," "Arrow" and similar well known Stonehouse types.

A few are shown here. Many others are illustrated, in full color, in our new Catalog No. 9.

STONEHOUSE steel SIGNS For Accident Prevention

If you haven't a copy of this new Stonehouse Catalog, 64 pages, may we send it to you? It's free on request.

Stonehouse

SIGNS, inc. MANUFACTURERS . Stonehouse Bldg., 9th at Larimer

"Signs Since 1863"

Denver 4, Colorado

NOTICE BE AREFULL AREFULL

DANGER



ACCIDENT PREVENTION . Steel SIGNS IN STANDARD COLORS AND DESIGNS

# "BLUE RIBBO VENTILATORS

#### FOR WORKERS'

- · Safety
- · Health
- Comfort
- · Efficiency

#### VANO Design "A" VENTILATOR



Vano Design "A" cooling interior of furnace, supplying fresh oir through 10 feet of "Ventube" to provide safety and comfort during

Vano Design "A" delivering fresh air to cable manhale, expelling sewer gas, making entrance safe in a few minutes.

Vane Design "A" Ventilator pro-few accessories feeds large volume into tank cor, driving fumes, stagnant or hat air underly and comfort.









Vano supplying free air in Reactor are of Synthetic

Ventilator supply-ing fresh air to men working in wing compart-ments, fuselages,



Powered by a  $\frac{1}{2}$  hp motor, and equipped with the exclusive Coppus axial-flow propeller-type fan, this general-purpose blower delivers 1500 CFM of blower delivers 1500 CFM of fresh dir. It supplies vernitation for tanks, tank cars, drums, vats, underground cable manholes, pipe galleries, airplane wing compartments and fuselages, and other confined places. Weighs only 103 lbs. Uses 8". diameter flexible canvas tubing ("Ventube").





VENTILATOR-EXHAUSTED







For withdrawing welding fumes from confined places or directly from the welding rod ... or for expelling fumes or hat air from enclosed vessels. You can get it with 8" suction inlet for 8" non-collapsible tubing ... or with multiple inlet nozzles for 5", 4" or 3" suction hose. The discharge outlet takes 8"
"Ventube". Powered by a ½ hp motor, it weighs only 85 lbs.

			المحاصلين والماليك	Contract of the last		
COPPUS	ENGINEERING	CORP.	130 PARK	AVENUE,	WORCESTER	2. MASS.
Please or	and information	on the	Blowers t	hat clear t	he air for Ac	tion.

- in tanks, tonk cure, drume, etc.
- in underground cable
- in aeropione fuseingen, wings, etc.

	general man co	oling.
п	around crackis	ng stills
Ħ	exhausting v	welding
	fumes.	

NAME ...

COMPANY

ADDRESS

COPPUS "BLUE RIBBON" PRODUCTS - Designed for Your Industry, Engineered for You

# NATIONAL SAFETY NEWS

OCTOBER 1951

Vol. 64, No. 4

THE COVER: Designed by Bill Wendland

	Paul Bunyan's Nephews-Bill Andrews
	Before the Blueprints
	It Goes Where Men Can't-Jervis C. Webb 94
	Health on the Route of the Great White Fleet— Edward I. Salisbury, M.D
	How to Prepare a Safety Manual—J. E. Appel 96
	Hope for the Handicapped-Colonel E. A. Baker 91
	A Century's Progress in Fire Detection—Francis E. Evans. 100
	You and the Newspapers-Sydney Ingham 102
	What's Wrong with Small Business?—Industrial Safety Panel
	Congress Bound—Diary of a Safety Engineer— Bill Andrews
	Safety and Luxury Afloat—Rear Admiral H. C. Shepheard
	When Your Safety Program Goes Sour- Edwin E. Glomstead

#### DEPARTMENTS

Editorial 87	Green Cross News130		
The Safety Valve108	Coming Events136		
The Honor Roll110	The Safety Library146		
The Accident Barometer112	Calendar Centest Winners174		
Industrial Health	Safety Posters180		

30,100 copies of this issue were printed

BILL ANDREWS, Editorial Director CARMAN FISH, Editor NORVAL BURCH, Associate Editor \*ROBERT L. MEYER, Associate Editor C. H. MILLER, Advertising Manager RALPH MOSES, Art Director \* On Military Service

NATIONAL SAFETY NEWS is published monthly by National Safety Council. Copyright 1951 by National Safety Council. Printed in U.S.A. Entered as second class matter June 21, 1921, at the Post Office at Chicago, Illinoia, under the act of March 3, 1279. Sunheerption rate: To members, 85.50 per year, single copies 55 cents; to non-members, 87.50 per year, single copies, 75 cents. Quantity prices for yearly subscriptions and single issues on request, Member Audi: Bureau of Circulation. Indexed in Industrial Arts Index. Statements and opinions advanced in signed articles are personal expressions of the authors, not necessarily those of the National Safety Council.

#### **National Safety Council**



Home Office-425 North Michigan Ave., Chicago 11, Ill.

EASTERN OFFICE-800 Chrysler Building, New York 17, N. Y.

WESTERN OFFICE-111 Sutter St., San Francisco 4, Calif.

#### Chairman of the Trustees:

WILLIAM A. IRVIN, Member, Finance Committee and Board of Directors, United States Steel Corp., New York.

#### Chairman, Board of Directors:

CHARLES R. Cox, president, Kennecott Copper Corp., New York.

NED H. DEARBORN, Chicago.

#### Vice-Presidents:

#### For Forms

GUY L. NOBLE, managing director, National Committee on Boys and Girls Club Work, Chicago.

#### For Finance, and Treasurer

O. GRESSENS, vice-president and comptroller, Commonwealth Edison Co., Chicago.

#### For Homes

DR. D. B. ARMSTRONG, second vicepresident, Metropolitan Life Insurance Co., New York.

#### For Industry

J. E. TRAINER, vice-president and production manager, The Firestone Tire and Rubber Co., Akron, Ohio.

#### For Local Safety Organizations

KENNETH B. COLMAN, Seattle, Wash.

#### For Membership

E. W. KEMPTON, assistant vice-president, United States Steel Corp. of Delaware, Pittsburgh, Pa.

#### For Public Information

BOYD LEWIS, executive editor, NEA-Acme, New York.

#### For Schools and Colleges

Dr. JOHN W. STUDEBAKER, vice-president and chairman of the Editorial Board, Scholastic Magazines, New York.

#### For Traffic and Transportation

THOMAS H. MACDONALD, commissioner of public roads, Bureau of Public Roads, Department of Commerce, Washington, D. C.

#### For Women's Activities

MRS. GEORGE W. JAQUA, safety chairman, General Federation of Women's Clubs, Winchester, Ind.

# "CHECK-SLIP has been the perfect solution to a tough problem"

Says Mr. Charles T. Belbin, Building Superintendent, Wire Building, Washington, D. C.

How to maintain white asphalt tile floors was the problem in Washington's beautiful new Wire Building. As the building superintendent points out in his letter, ordinary slippery floor waxes caused accidents, while the "non-skid" finishes discolored the white tile and failed to wear well.

CHECK-SLIP (although it contains no wax) combines the advantages of high-grade floor waxes and anti-slip finishes. CHECK-SLIP gives long wear, beautiful lustre and low upkeep combined with effective anti-slip protection.

Ask your whiz supplier to show you how CHECK-SLIP advantages apply to your floor maintenance and safety problems.

CHECK-SLIP demonstrated these advantages on asphalt tile and terrazzo:

- Positive Anti-Slip Protection
- Easy to Apply and Maintain
- Long-Wearing, Lasting Beauty
- Saves Time, Saves Money



Whiz

T. A. HOLL

CAPTAGEN BIVISION OF CORPORATION MICH CHEMICALS

This is a white asphali tile floor in the Wire Building, kept clean and slip-safe by CHECK-SLIP.



### **BAUSCH & LOMB OCCUPATIONAL VISION SERVICE Case History**

#### Percentage of Workers Meeting **Visual Requirements Tripled** On One Western Electric Job

BEFORE O.V.S. PROGRAM

WITH MEETING 29.6%

PREDICTED RESULT FROM O.V.S. PROGRAM

NOT MEETING VISUAL REQUIREMENTS

ACTUAL RESULT WITH O.V.S. PROGRAM

Preliminary to testing of workers under the Occupational Vision Service program, Supervisors of the group of Key Adjusters at one Western Electric plant rated the job performance of their workers; 29.6% were classified "satisfactory in meeting visual requirements," 70.4% "unsatisfactory." On the basis of expected performance when visual standards were established, it was predicted that 68% would prove satisfactory. After the visual test standard had actually been applied for six months, a performance check-up revealed that 88.2% of screened key adjusters rated "satisfactory" on job performance.

## A PROVED METHOD

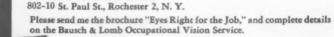


## To help your plant make money 9 Ways!

It's a matter of record that 4 of every ten industrial workers are visually unqualified for satisfactory performance on their jobs (established by the records of millions of visual performance tests of industrial workers in more than 4,000 different job categories). When visual skills are correlated to job requirements, working efficiency is notably increased. The Bausch & Lomb Occupational Vision Service is a scientific method for meeting this problem of "Eyes for the Job." Employee participation is voluntary...and workers like the program. Benefits which accrue in plants using O.V.S. (benefits which can accrue in your plant, too) include:

- 1. Improved quality of production
- 2. Increased production per worker
- 3. Reduced waste of materials and work rejects
- 4. Improved accident record
- 5. Reduced labor turnover
- 6. Lowered training cost
- 7. More effective placement
- 8. Reduced absenteeism
- 9. Improved employee relations

#### MAIL TODAY!



BAUSCH & LOMB OPTICAL CO.

on the Bausch & Lomb Occupational Vision Service.

Title ..... Name ... Company ..... 

### NATIONAL SAFETY NEWS

OCTOBER 1951

### **Congresses Are Built**

TOPSY had very little in common with a National Safety Congress. The little gal in Uncle Tom's Cabin, you remember, said she wasn't born, she just "growed."

National Safety Congresses aren't born—but they don't just grow either. They are built laboriously on a 'round-the-year schedule. Into the building process go long, hard work and sharp, clear thinking by hundreds of men nad women in all industries and in all parts of the country.

The reason you will find the 1951 Congress and Exposition tailored to your needs, is that people like you, facing your kinds of problems, have done their best to produce programs designed to help them and you to find answers to those problems.

Each industrial section of the National Safety Council has an executive committee. And one of the key jobs on each of those executive committees is that of program chairman. Each program chairman surrounds himself with a strong committee which canvasses the needs of his field of interest. Having determined the general outline, they line up the best available speakers on the various subjects.

This sounds simple. Actually, it involves an almost unbelievable amount of labor. I know from first hand knowledge that each program committee encounters some crisis during the year which seems

insolvable. Each program chairman at least once a year becomes convinced that all his efforts are unavailing and that a good section program cannot possibly be made ready in time for the next Congress.

But the problems somehow are always solved. The program does get built. And, because people like you have worked so hard, it is the kind of program you want.

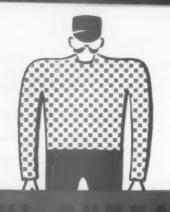
Neither you nor I will ever be able to do much to show our Congress builders how much we appreciate their efforts. They don't expect us to.

But if we come to the Congress; if we regularly attend the meetings; if we carry home even a small portion of the information and ideas to which we are exposed, then we and our companies will profit from the Congress. Our efforts to hold down accident rates will be aided. Lives will be saved and injuries prevented.

And this is the one reward that program chairmen want—the knowledge that their work has done something real for the cause we all serve.

If, in addition, a few of us will remember to look up our program chairmen and tell them how we profited by their work, we will surprise those hard-working people immensely—and please them even more.

Ned HDearborn



A layman's look at three West Coast logging operations where safety is teamed with production



By BILL ANDREWS

OLD-TIMERS in logging are like all old-timers. Their theme song is, "You should have seen this business in the good old days!"

Because there is running water in the camp; because machines do much of the work; because many loggers live at home and drive to work; because there are conservation and safety programs in the woods—because of these and many other things, the old-timers would imply that modern logging is an effeminate and degenerate descendant of the once robust, virile, gusty business which produced, as its principal myth, the figure of the giant Paul Bunyan.

This article is a vigorous rebuttal of the old-timers' argument.

First, I will grant certain things. It is probably true that there is less need for Herculean strength

Below: Terminus of Molalla Forest Road, Crown's dump on Willamette River. To prevent spilled loads, rules require tightening of



Above: Jack Kenney, safety supervisor of Molalla Forest Road, checks loading and driving practices, can ben trucks and drivers for violations. Most of his work is education.



Relief map shows every detail of terrain of Long-Bell's Ryderwood operation. This permitted proplanning for safety from the start.

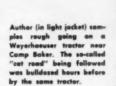
> Loader setting tangs for crane loader at Weyerhoosser landing near Camp Baker. Tractor at left is yarding with arch.

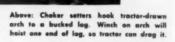
in the woods today than formerly. It is probably true that pay day in the vicinity of a logging camp is quieter and less homicidal. Labor turnover—though still astronomical in comparison with that of, say, automobile factories—is far lower than in the days when every logger carried his bed roll on his back. Certainly more people are doing more for the welfare of both the timber and the loggers than in former years.

But today's loggers are taking out timber that was too tough for their predecessors to get. They are going higher in the hills for it, getting it off worse slopes, getting it out of awkward ravines. They are hauling it out faster, handling it better. They are finding profit in a kind of timber that Paul Bunyan and his contemporaries thought was sheer waste.

At the same time, they're doing a much tougher job than the

-To page 113





Left: Rafting ground below Crown's Molalla dump. Boom man is pushing log into pocket with pike pole. Operation is one of sorting.

# LEVER BROTHERS CINEM

Main entrance to Lever Brothers' new Los Angeles plant, has reflecting pool.

Airplane view of the plant looking south.
Buildings occupy about one-third of the
30-acre tract eight miles east of downtown Los Angeles.

THIRTY YEARS of safety experience in the manufacture of soap and shortening were drawn upon in the design and construction of the new Los Angeles plant of Lever Brothers Company.

When the plant was on the drawing boards of the builders, work was already under way by Lever safety engineers to incorporate in buildings and equipment advanced ideas for the protection of life and property against accidents and fire and to facilitate housekeeping.

Lever safety engineers prepared complete specifications for safety and these were issued to the design engineers in a paper entitled Safety Considerations in the Design of the Los Angeles Plant. Through every phase of the work, blueprints were double-checked by Lever project and safety engineers to insure the safest possible working conditions.

# Before the Blueprints

While the plant was still on the builder's drawing boards, Lever Brothers engineers were at work on safety specifications



Once the new plant began operation, the organized safety program for employees was put into effect. The background for this planning was based on experience with five other soap and shortening manufacturing plants operated by Lever Brothers. Safety programs in these plants have resulted in a 90 per cent reduction in the company's accident frequency rate during the past 30 years. Throughout that period, the rate has been consistently below the average for the industry.

Among companies with comparable operations reporting to the National Safety Council, the frequency rate for disabling injuries has been less than half the average.

Two Lever plants hold national records for man-hours worked without disabling injuries. The plant at Hammond, Indiana, ran up over 3,600,000 accident-free hours for the soap industry record, and the Edgewater, New Jersey, plant figure of 1,505,000 hours stands as the best ever



Hinged bridge on tank our platform lowered for safe access to car dome.



Ne job for a fat man or one with claustrophobia. Men entering these tank cars wear wristlets so they can be pulled out quickly in an emergency.



Tank car access platform with connecting bridges elevated permit shifting cars.



At the Los Angeles plant many interesting safety and fire protection features have been included.

The fire protection underground at the plant is a loop system arranged so that a minimum num-



Stairways and fixed ladders with antiskid treads provide safe access to elevated locations. Shoes with slip-resistant soles also reduce chances of falling



ber of sprinkler systems would be out of service in the event of a break in a main. The water supply from the public system is augmented by a 300,000-gallon ground level storage tank, and a 100,000-gallon elevated tank. A 1500 g. p. m. electric motor-driven automatic pump and a 1000 g. p. m. standby turbine-driven pump take suction from the ground level tank thus providing an independent system of substantial capacity.

-To page 114







Indispensable in harvesting bananas is the machete — No. 1 plantation hazard. Left: The ANTIGUA of United Fruit Company's Great White Fleet loads in Barrios, Guestemale with a carge for the U.S.A.

Health on the Route of the

# **Great White Fleet**

By EDWARD I. SALISBURY, M.D.

A company's 50-year war against disease has brought economic progress to Middle America

EVERYTHING thrives in the tropics—food, wood, essential materials and disease. Infected wounds are a much greater menace than in temperate regions.

Today, Middle Americans are contributing more than at any other time in history to the world food basket with millions of tons of sugar, coffee, bananas, cocca, and coconuts exported annually. Rubber, abaca or manila hemp, essential and other oils and woods are other commodities which are produced in quantity for export. On the other hand, disease which thrived with a luxuriance that

Dr. EDWARD I. SALISBURY is Medical Director, United Fruit Company. matched jungle growth no longer shackles progress.

The rise of Middle America to a strong, vigorous and economically solid entity would not have been possible, many observers believe, without control of the mosquito menace, improved sanitation and modern preventive and curative procedures.

For the past 51 years, Middle America has had a valuable ally in the war against disease. The founders of the United Fruit Company, growers of bananas and other tropical products in twelve Middle American countries, realizing that healthy employees were the key to success in any large agricultural venture, embarked on a broad and ambitious program

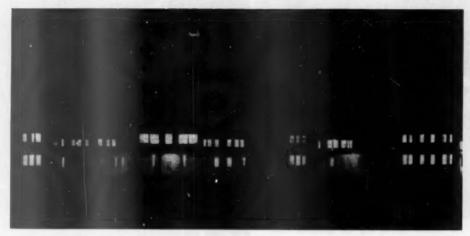
in 1899. Today, the company's continuing—and costly—program embraces field sanitation, routine and emergency medical and surgical treatment of 92,000 employees and their dependents, as well as private citizens in neighboring villages and farm areas.

This incessant vigilance and relentless war against disease has

Territory included in operations of the United Fruit Company.



National Safety News, October, 1961



striking night view of the company's new hospital at La Lima, Honduras.

paid large dividends in supporting the growth of Middle America's well-being. Unending effort in general vaccination, inoculation and blood testing, establishment and maintenance of water and sewage systems, garbage collection and disposal, regular medical inspection and numerous other costly public health enterprises of the sort accepted in the United States as governmental financial responsi-

Without malaria centrel, agricultural progress in Central America would be imposible. Left below: a foreman instructs a sanitation gang in insecticide spraying. Right: a mobile unit wages wer on the mosquite, a more dangerous enemy than bility, have become regular United Fruit Company practice.

First line of the company's defense against tropical disease is its corps of the traveling doctors, technicians, sanitation crews and field dispensers. Constantly on the move, United Fruit's medical department personnel goes from farm to farm, community to community administering medical treatment and immunizations, and making regular blood tests. By protecting their people against disease by inculation, and by discovering and treating cases in the early stages United Fruit's medical workers

perform service which is not only of immediate value in reducing pain and suffering, but which will pay off in the years to come when the children of today have grown to a healthy adulthood.

In actual practice, when a firstaid man suspects a case of malaria, he first sees to it that the case gets medical care, either in quarters or in the company hospital. Next he notifies the sanitary inspector who, with his crew, goes to work on the area like a sapper

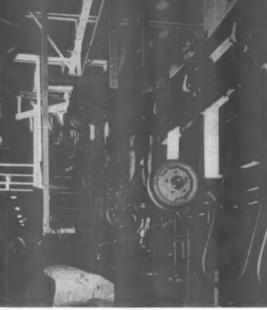
-To page 109







Log conveyor handling pulp logs to barking drums.



Trolley conveyor handling automobile parts. Rugged steel mesh guards are installed from the beginning of the incline until the parts reach their destination.

# It Goes Where Man Can't

By JERVIS C. WEBB

The hardworking conveyor keeps materials flowing continuously through heat and bad atmospheres and near moving machine parts. It is removing bottlenecks and ≥aking the hazard out of unhealthy, dangerous and back-breaking jobs.

TWO YEARS AGO in Europe I saw conditions that were unbelievable. They were a reminder of the difference that mechanized materials handling can make in industrial operation.

Compare mechanized coal yards, foundries, paint shops, chemical processes and others with their old unhealthy, back-breaking, dangerous counterparts.

Consider the conveyor, for example. It goes where man cannot, or should not, go — into and through heat, bad atmospheres, cutting heads of machines—all kinds of conditions. Yes, industry is safer because of conveyors.

This article will include:

1. A brief discussion of the present conveyor equipment code and contemplated revisions, also generally accepted terms describing various types of conveyors.

2. Comments on over-all safety aspects of conveyorized manufacturing versus manual and other methods, also the desirability of finding the mean point in safety measures, not going too far yet far enough.

3. What can manufacturers and user do to insure proper safety features in conveying systems and the development of safety consciousness?

4. Some practical suggestions picked up from friends manufac-

Jernis C. Webb is Treasurer and General Manager, Jervis B. Webb Company, Detroit, Michigan. This article has been adapted from a paper presented at the 21st Annual Convention of the Greater New York Safety Council.

turing and using conveyors and from my own experience.

#### 1. Scope of the Code

The American Society of Mechanical Engineers has made a good start toward codification of safety suggestions. This document is entitled Safety Code for Conveyors and Cableways and Related Equipment—B20.1-1947.

The code covers generally and specifically the main types of conveyors. My rough selection is as follows:

BELT CONVEYORS. Continuous fabric, rubber, or steel belt of any width or length traveling on flat steel or wood beds, on flat or troughed roller beds, carrying packages, parts, ashes—in fact, almost anything.

APRON CONVEYORS. One or more, usually two, continuous strands of chain between which are suspended aprons, slats, pans overlapping or not overlapping, of many widths and lengths, with or without sides, carrying all sorts of materials.

Discharge end of steel apron conveyor handling metal turnings. Conveyor runs under factory floor, except the inclined portion which rises to dump contents into hopper.





Foundry mold conveyor. Drive is safely located in the pit below the floor covered by steel plate.

BUCKET CONVEYORS. Continuous belts, chain or chains, to which buckets are attached, carrying many types of material. Operated vertically, these conveyors are called bucket elevators.

CHAIN CONVEYORS. The term covers a multitude of designs and styles. Continuous chain or chains running over and driven by sprockets, supported by metal or wood track or roller beds. Sometimes called a drag chain. Material sometimes rests on the chain, sometimes rests on carts or trucks which are fastened to and pulled by the chain. Sometimes the chain itself works and advances bulk materials along by itself operating in a trough.

FLIGHT CONVEYORS. Again single or multiple strands of continuous chain, but to which cross bars or flights are attached for pushing and scrapping the material along in troughs.

Gravity Conveyors. Series of free rollers, or wheels or a flat sheet set in frames and supports such that materials are moved along by the force of gravity.

LIVE ROLLER CONVEYORS. Series of rollers motivated by belts or chains from underneath or by sprockets at the end of each roller. Materials are moved along as they rest on the turning rollers.

OVERHEAD TROLLEY CONVEYORS. Picture an overhead track on which are suspended trolleys which in turn are spaced and driven by a continuous chain traveling parallel to the track. Loads of all sorts are suspended or moved along below these trolleys in or on hooks, buckets, trucks. baskets, suspended on or pulled by the chain and trolleys.

SCREW CONVEYORS. Consists of a helical screw in a guide channel whose relative rotations advances the material handled.

In every industry some of these conveyors are an integral part of manufacturing assembly. They are providing continuous mechanized processing facilities, are tied in with temporary storage, warehousing, shipping and receiving activities, or at the least are transporting raw materials, finished parts, or fuel from one place to another on the grounds.

These units move powerfully and mechanically and, as such, safety features are as essential to them as they are to machine tools, trucks as other mechanical devices.

trucks or other mechanical devices.

The code treats these and other

-To page 168



By J. E. APPEL

#### Part I-Writing the Manual

DO YOU really need a safety companies have assigned to their manual in your company?

That's the first question you should ask before you tackle the job of preparing such a manual. Make no mistake about it: a good safety manual is not come by easily. It will be the result of long, hard, time-consuming labor. It will cost money. And it will not provide a cure-all for your accident problems.

Many companies find manuals of great value. Others do very well without them. So ask vourself very seriously what it is that you want the manual to do for your company, and then make a careful analysis to determine whether a manual is the best tool for doing it.

Here are some of the objectives

manuals:

- 1. To give a formal presentation of the rules and regulations employees are expected to follow.
- 2. To stimulate accident prevention by the company, union, and employees.
- 3. To insure correct interpretation of safety policy and administration.
- 4. To indicate to employees the company interest in safety.
- 5. To avoid friction and misunderstanding on safety procedures.
- 6. To act as an authoritive ready reference on safe practices.

Unless these or other reasons carry great weight with you, stay away from the manual idea and save yourselves much labor and heartache.

#### **Advance Planning**

But if you feel you need a safety manual, you can minimize both the labor and heartache by careful and patient preliminary plan-

Get the answer to these three questions:

1. Do we need a general manual for all employees or a series of man-

uals addressed to specific groups of employees:

- How will the manual be used?
- What type of presentation is likely to be most effective?

The general manual may have all the weaknesses that we mean by the words, "too general." It may either have to be very large and bulky or have to skip important details. It may be difficult to revise, because revision involves consultation with all departments.

The series of specific manuals, on the other hand, may be wasteful, particularly if much of the material in each is duplicated in the other. Conflicting treatments of similar problems may defeat the purpose of achieving uniformity of operating practice.

There is no single answer to the question, "Which type is better?" Each has its place, and your choice must be based on company

Take the second question above seriously. A manual which is designed to be used in certain situations and under certain conditions may be totally unsuited to other situations and conditions, just as any tool may be right for one job and wrong for another. The manual is a tool, and you

J. F. APPEL, is Supervisor of Sufety, Commonwealth Edison Company, Chicago, and a member of the Executive Committee of the Public Utilities Section, NSC. This article was prepared as a project of the Section's Training Committee. This article is being pub lished in two installments. Part II, which will appear in an early issue, will discuss the details of producing the manual



must know how it is to be used before you can design it.

Only when you have the answers to these two questions can you intelligently face the third, which involves the choice of a method of presentation.

Some manuals must be formal, tightly written, highly technical and detailed. Others may stress a few points of an elementary nature, and may use art, humor and other devices to dramatize them. Some may be bulky tomes; others must be designed to fit in the hip pocket of a pair of overalls. One might have to speak the language of the new inductee who is not vet familiar with either the operations or the vocabulary of the industry; another might concern itself solely with an audience of trained and experienced craftsmen, with a considerable degree of sophistication in its subject field.

These are points to be settled in advance. You cannot intelligently proceed to actual preparation of the manual until they are settled.

#### **Determining the Contents**

The contents of a safety manual will vary with the requirements of individual companies.

A single manual covering the

operation of an electric utility, for example, might include the following major topics:

- Purpose and scope of the manual. General instructions to all em-
- plovees. Supervisors' responsibilities.
- Employees' responsibilities.
- First aid. Fire prevention and control.
- Protection of the public.
- Protection of other employees.
- Personal protective equipment. 10. Use of tools.
- 11. Rules for specific operations such as:
- Production
- h. Transmission Distribution
- d. Transportation
- e. Maintenance
- f. Shops
- g. Storage and material handling
- h. Work on customer's premises
- i. Office work

Point 11 in the above list might be included in a general manual or might form a series of specific manuals for different groups of employees.

Obviously, the list of contents for a marine fleet or an automobile factory or a printing plant would be quite different from this. But, in any industry, the first step in preparation of a manual should be construction of this framework on which the whole manual is to be built. There should also be a

clear understanding of the amount of detail needed under each point.

#### **Gathering Information**

It has often been said that safety rules are written in blood. This is merely another way of saying that they are the results of experience learned the hard way. A study of the accident experience of others helps prevent many similar accidents

Sources of information which can be used include:

- 1. The company's own accident experiences
- Safety suggestions submitted through the company suggestion
- 3. Safety meetings.
- 4. Inspections
- 5. Manuals of other companies enguged in similar work.
- National Safety Council. Industrial and trade associations.
- 8. American Standard Safety Codes. 9. Casualty insurance companies.
- 10. Applicable federal, state and local safety publications, codes, and regulations.
- 11. Individuals in the company organ-

Just a word on the last point, the consulting of individuals.

The individuals should be consulted for two very practical and

-To page 139

# Hope for the Handicapped

By COLONEL E. A. BAKER

Few of the disabled are hopeless. Rehabilitation of mind and body enables many of them to live useful and happy lives

YOU CANNOT rehabilitate a man as long as he is in a despondent frame of mind. The person who has lost something he prizes most highly, such as sight, is going to concentrate his whole attention on what he has lost to the exclusion of all else.

That very important factor in rehabilitation was recognized by Sir Arthur Pearson, one of the grandest men who ever lived, in the opinion of thousands who knew him. He was founder of St. Dunstan's, an institution which has brought new hope to Britain's blind.

Sir Arthur was the publisher of 11 periodicals, including London Daily Express, Pearson's Magazine and Pearson's Weekly. At 48, after some 25 years in journalism, he lost his sight. He had adjusted himself and when World War I broke out he came up with an idea. He believed that those who were blinded in the war could be adjusted to a new life by adapting their previous experience and education to their needs.

To illustrate I will tell something of my own experience. Sir Arthur brought me in touch with another lad who had lost his sight, and lost it in the war. When I discovered we had these two things in common, we naturally began to chat. Soon I discovered that this chap had another disability. He had lost his left arm.

What do you think happened to me then? I began to feel sorry for him and to feel grateful that I still had two good arms. From that point on I began to count the assets I had left. At St. Dunstan's I was shown how to develop and utilize my remaining talents.

I had started life with my feet on the ground and had turned to engineering. An argument with a rifle bullet altered my point of view and eventually pitchforked me from engineering which most of you associate with the term into what I like to call "human engineering." And my six months' term at St. Dunstan's was a great help.

Perhaps from my own experience I can give a few useful hints on working for the blind and for the handicapped in general. There are still too many people who look at things only from the material point of view. Too often they forget the human element and human relations.

In 1916 when I came back from overseas with some germs of ideas which had been planted in my mind at St. Dunstan's, I landed in Canada with some people who had been blinded in the war and some who had lost their sight in civilian life. We surveyed the Canadian situation and found it woefully lacking.

Headquarters for the rehabilitation of Britain's blinded is St. Dunstan's, at Brighton,
Sussex. (Photo courtesy British Information Services)



Blinded in World War I, COLONEL E. A. BAKER was trained at St. Dunstan's in England, a world famous institution for the rehabilitation of those who have lost their sight. For several years he has been managing director of the Canadian National Institute for the Blind. Toronto. This article has been adapted from an address before the Annual Meeting of the International Acetylene Association, Montreal, May 21, 1951.

There were academic and technical schools for the youthful blind, but for adults there were only two associations — one in Montreal and one in Ottawa—that attempt to train and give help. There was one free library operating out of Toronto and that was the total of the country's assistance for the blind.

Today in Canada we have a nation-wide organization operating as The Canadian National Institute for the Blind. Of the total number of blind 11,000 are 21 to 69 years of ag. Of this number, 4,800 are women. Then we have about 900 in the age group 6 to 20, and about 150 under 6.

Our analysis shows that more than 80 per cent of all the blind in Canada lose their sight in adult life, and no class or group is immune—farmers, lawyers, doctors, mechanics, engineers, bush workers, fishermen, and even politicians. We have a cross section of society, with varied talents, abilities and inhibitions.

In our rehabilitation program we leave the education of the youthful blind to those public agencies that are properly equipped to provide for sightless children. When it comes to adult life we step in to furnish employment opportunities or further training followed by placement, and then to take care of all those to be helped, at whatever age.

At present, over 1,700 adults are employed full time with a payroll of more than \$2,500,000 a year. These people are self-supporting and are able to look after their families. In addition we have 500 who have been assisted in taking an independent occupation, such as piano tuning, music teaching, farming and bee keeping.

Then we have more than twice the total of those two groups who, in addition to being incapacitated by blindness, are by reason of age or disability unable to do full-time work but are able to work in their own homes. These people are working more or less as their



This blinded veteran of World War I, learning operation of woodworking machines, is one of many who have been trained at \$1. Dunston's.

physical capacity permits. They are able to supplement their pensions or their income, and in many cases are fully self-supporting.

We like to think what we have done in the case of the blind has afforded inspiration to our sighted friends in the communities where successful blind people live, and in addition that it has furnished inspiration to other groups of handicapped who have been hopeless for so long. So we are going along with these rehabilitation techniques which are both physical and vocational, and including along with that, social and recreational activities for the handicapped who most often in the past were pushed aside from the active stream of life and left to vegetate or dry rot.

#### Treatment First

It is estimated that in Canada today there are 900,000 seriously handicapped persons. In the United States you have proportionate numbers, as have Great Britain and other countries. We do not consider it good rehabilitation to allow any individual to

work whose condition can first be improved by treatment. When everything possible for physical restoration has been done, then is the time to step in with vocational counsel and training, with the necessary work adjustment to their new outlook, and with training for and assistance in taking advantage of employment opportunities.

It is man's God-given right to be respected and self-respected, and no man or woman can be so in enforced idleness through lack of opportunity and a hopeless outlook for the future. I can give examples of what I call good business in the rehabilitation field.

We had a young war veteran who was born in Brooklyn. He came up to Montreal, joined the Black Watch and went overseas with the Canadian forces. He came back a sergeant — but blinded. He decided he wanted more education. He had not even completed grade school. He went back to school, acquired the necessary credits to enter Toronto University where he got his degree of Bachelor of Arts.

Then he decided to do research work and has now completed the



Early fire protection in New York. Watchmen in tewers throughout the city scanned the herizen through telescopes looking for smoke or flames. When fire was detected City Hell bell was rung.

### A Century's Progress in

# FIRE DETECTION

By FRANCIS C. EVANS

Automatic devices not subject to drowsiness or panic now keep watch over life and property

In THIS "what-will-they-think-of-next?" age of electronics and nuclear fission, few people appreciate the advances made in the field of fire protection. Perhaps a brief tracing of the development of fire detection in New York City will show what this taken-forgranted safeguard has contributed to our city's preservation.

Most of the business section of New York was completely destroyed by a great fire in 1835. Following this catastrophe, the first fire detection system was established. This consisted of a series of bell or watch towers. Watchmen were stationed in the cupola of City Hall, and when a fire was observed the City Hall bell was rung. The direction of the location of the fire was pointed with a flag by day and a lantern by night.

Other watchmen were placed in the towers of the Hall of Justice, the reservoir, and elsewhere in the city. When the City Hall bell rang, all the other bells took up the alarm and rang continuously until the fire was out. If nothing else, the clamor must have served to keep the population fire-conscious.

One hundred years ago the first revolutionary improvements were made in the New York City fire alarm system. Following the invention of the telegraph, lines were strung between towers and connected to the stations of the fire departments. With this came the Varick Street tower, 125 feet high, the tallest in the City. From this height, in those days, the watchman's view was unobstructed. He was equipped with a long hand-telescope and night glass to detect smoke or flame,



Acre annunciator, usually installed near building entrance, indicates particular floor or fire area where alarm originated.

which were seldom visible until the fire had gotten such a start that the building could not be saved. Fire-fighting efforts were directed mainly to confining the fire to as small an area as possible.

By the end of 1878 the custom of ringing fire bells throughout the duration of a fire was discontinued. Also by that time, volunteer firemen had been succeeded by paid forces on continuous duty at the fire houses. Signals were passed to all engine houses by telegraph. With the introduction of

Francis C. Evans is Engineering Supervisor, American District Telegraph Company, New York City. This article has been condensed slightly from a paper presented at the 21st Annual Safety Convention of The Greater New York Safety Council.

Contral station operators on duty 24 hours a day check incoming signals and initiate corrective action. Fire alarms are automatically transmitted over a direct wire to the fire department. Burglar alarms are investigated by uniformed guards, with police cooperation when necessary.

fire alarm boxes on the streets the towers joined the ranks of other curios, and gradually disappeared.

One method of detecting a fire and getting the fire department into action is for someone to spot a fire and operate the nearest street box or telephone the fire department. There are, however, several recognized drawbacks to relying on this procedure. First, as a rule, by the time a fire can be spotted by a passerby, or even by someone on the premises, it may have reached sizable proportions. Secondly, many people who discover fires become panicstricken and do not take proper or efficient action.

A review of the records of delayed alarms will show you what I mean. And please bear in mind that these are not the exceptions they are common and typical. People often become confused and give wrong information. They have been known to call the police department instead of the fire department. Sometimes they wait for public telephones that are in use or party-lines that are in use. One of the most common mistakes

Sprinkler supervisory and waterflow alarm transmitters. These instruments are actuated by detection devices installed on the sprinkler system and signal control station when an abnormal condition exists.







Light-receiver unit of a smake detection system. A similar device on the apposite well projects a light beam to the receiver. Smake passing through the beam reduces intensity of light and operates alarm.

is to try to put out the fire without calling the fire department. Another is wasting valuable time investigating the source of smoke before giving the alarm.

Here are a few instances: Recently hundreds of spectators gathered in the streets and on a nearby bridge to watch a building go up in flames, each person assuming that an alarm had been turned in; but no alarm was received by the fire department until the building was beyond saving. Not long ago a man jumped in his car and drove three miles to the nearest telephone to report a fire; on his way, he passed two fire stations. In another instance, an excited woman called the fire

department to ask the location of the nearest fire alarm box—when asked where the fire was, she blurted "Right here in my house!" and hung up.

#### **Detection Systems**

Modern-day automatic fire detection systems are the answer to this problem. They are on the job 24 hours a day—every day. They are designed to detect fire in its early stages and to send the alarm automatically. In these respects they are more constant, dependable and accurate than any human being. In fact, these systems can and are normally expected to distinguish between friendly and unfriendly fires.

The majority of our industries are full of necessary friendly fires. There are heating systems, ovens, dryers, steam rooms, various processes requiring heat, air conditioning and many others. These (until they get out of hand of course) are so-called friendly fires. An automatic fire alarm that signalled every time a furnace door was opened, or one that signalled whenever the sun shone on it, or when the janitor turned the heat up in the morning, would be more of a nuisance than a safeguard. For that reason, systems

-To page 165

# You and the Newspapers

By SYDNEY INGHAM

The editor wants news; you want publicity for safety. Here are suggestions for getting together



LIKE every other sustained effort, an accident prevention campaign must make workers and employers stop, look, and listen, and give proper direction to thought and action. Publicity is the life blood of every effort to stir men and women to action.

Newspaper publicity is a neglected instrument for the education of employers, employees and the public in all phases of commercial and industrial activity, including accident prevention. Properly done it presents information to the right people at the proper time and in the right place.

Newspaper publicity that will sustain interest and maintain activity in an accident prevention campaign is of a highly specialized character, but so is similar publicity for scientific works, and many other subjects where information is difficult to prepare with clarity, simplicity and briefness and still be kept straightforward, colorful and convincing.

Few safety engineers are trained to appreciate the value of good newspaper publicity, or, if they have such appreciation, how to write a newspaper story and how to get effective distribution of it. Even where local industry has a public relations department good publicity for accident prevention campaigns is frequently overlooked and opportunities are lost. A public relations man slips

if he does not inform himself about accident prevention campaigns in his client's works.

Obviously, the best way to learn how to write publicity is to study at a school of journalism. There are also good manuals for every branch of publicity as well as a shelf full of books to serve general and specific fields of public relations.

Diagnosis of what is on the worker's mind is important to insure proper direction of publicity. Diagnostic ability is hard to come by but a working measure of it may be acquired by studying the techniques. One who has it is sens:tive to public reactions and he gets for his timing and production a healthful public response. It must never be overlooked that some of the publicity relative to accident prevention



Sydney Ingham, who now lives in Ludlow, Mass., had spent 36 years in safety work when he retired in 1948. For many years he was safety director for the Ludlow Manufacturing Associates and later served in a similar capacity for the Springeld, Mass., Armory, and the Atomic Weapons plant at Los Alamos, N. M. For three years he was vice-chairman of the Textile Section, NSC, and was one of the group that founded the Hampden County Safety Council. He has been a member of the American Society of Safety Engineers since 1922 and was honored by life membership on his retirement.

campaigns, for obvious reasons, must be slanted toward management.

The writer of newspaper publicity must rely on the merits of his copy—the appeal of his story to the editor's news-value sense. Pressure should not be brought nor should pleading be resorted to for space. Once a story has been accepted, the writer should never suggest to the editor where to put the story. These harried individuals have their own problems and big waste baskets always handy.

Any attempt to "put something over" is fatal. How can one conceal the truth when the rattle of machine guns and the roar and rumble of bursting bombs can be picked up on a microphone and sent through a loud speaker distant half way around the world?

Many persons who are responsible for accident prevention programs are ignorant of the meaning, philosophy and spirit of publicity. In their confusion they get off to a bad start, and quit after a few blundering efforts. Others, by study, grasp the fundamentals of publicity and they make better progress.

Progress procedure is the how, when, and where. No matter how modest the objective, it should be planned to follow that procedure. Newspaper publicity should be presented as such. Few attempts to disguise it as news would succeed anyway. It must be written with the detached viewpoint of the news reporter. The story should be outlined in the mind before it is written and it must have a news slant, yet it is in a class by itself.

The lead paragraph should have the big outstanding fact that is news, and the employer, the employee and the feature should be in it. An example follows:

Five hundred employees in the rolling mill of Extra Steel Mills were feted today in the plant cafeteria for working more than a million man hours without a disabling injury.

#### **Minnesota Honors NSC Officers**



RECOGNITION FOR "outstanding leadership in the Safety Movement in America" was bestowed upon William A. Irvin, chairman of the Trustees, and Ned H. Dearborn, president of the National Safety Council by the State of Minnesota through the Minnesota Safety Council on August 17, at Duluth. The certificates were presented by Governor Luther W. Youngdahl at the Governor's Highway Safety Conference which is the summer meeting of the Minnesota Safety Council.

In the absence of Mr. Irvin, his certificate was received by Francis J. Gavin, chairman of

The body of the story then goes on to tell the reader what it is all about. The most important details are written first and the whole so written that each paragraph could be the end of the

Brevity, clearness and responsibility for the facts should be apparent in every story submitted. Above all accuracy must be observed.

Dramatic incidents command major attention. They set apart men and events. They illuminate the mind:

-To page 183

Governor Luther W. Youngdahl of Minnesota presents awards honoring William A. Irvin and Ned H. Dearborn. Others in group, left to right, are: Francis J. Gavin, who received the certificate on behalf of Mr. Irvin; Mr. Dearborn, and A. V. Rohweder, president, Minnesote Safety Council.

the board of the Great Northern Railway and a Trustee of the National Safety Council.

The citation to Mr. Irvin reads: Your deep interest in accident prevention, firmly established during your active administrative years with the United States Steel Corporation, became all the greater and national in scope with your affiliation with the National Safety Council in 1942.

This great influence has been felt in Minnesota since your visit here early in 1943. Your achievements in safety since then constitute a continuing living memorial to your business acumen and to your great humanitarianism. (Signed) Luther W. Youngdahl, Governor of Minnesota; A. V. Rohweder, President, Minnesota Safety Council.

Mr. Dearborn's citation reads:

As President of the National Safety Council you have given generously, with a spirit of friendliness, of your great abilities, knowledge and inspiration to the Minnesota Safety Program.

Many Minnesotans alive today owe much to your personal interest in their safety.

Six awards won by various groups, communities and agencies in the state were presented at the Conference by Mr. Dearborn.



# What's Wrong with Small Business?

#### THE QUESTION:

What is the principal reason small business does not readily accept accident prevention service? What can be done about it?

#### THE PARTICIPANTS:

FRED W. BRAUN, vice president and chief engineer, Employers Mutual Liability Insurance Company of Wisconsin, Wausau, Wis.

ROBERT W. HUTCHINSON, engineer, casualty dept., Marsh & McLennan, Chi-

ARTHUR S. JOHNSON, vice president, manager, engineering dept., American Mutual Liability Insurance Co., Boston. G. S. KALLENBAUGH, asst. superintendent. Industrial Commission of Ohio,

Columbus, Ohio.

W. DEAN KEEFER, 2d vice president,
Lumbermen's Mutual Casualty Co., Chi-

ROBERT M. MURRAY, chief, Division of Industrial Inspection, Rhode Island Department of Labor, Providence, R. I. OSCAR T. NELSON, director, Safety

oscar 1. Nelson, director, Safety and Sanitation, Wisconsin Industrial Commission, Madison, Wis.

Col. Reuel C. Stratton, supervising chemical engineer, The Travelers, Hartford, Conn.

Donald G. Vaughan, manager, Inspection and Engineering Department, Aetna Casualty and Surety Company, Hartford, Conn.

LEN P. WALTERS, Loss Prevention Research manager, Hardware Mutual Casualty Co., Stevens Point, Wis.

T. F. WHALEN, asst. manager, Loss Prevention and Engineering Division, Royal-Liverpool Insurance Group, New York.

CHARLES R. ZESKEY JR., chief engineer, T. H. Mastin & Co., Kansas City, Mo.

THE INDUSTRIAL SAFETY PANEL is an informal group of safety workers representing various branches of industry. Each month part of the Panel membership answers questions relating to accident prevention principles and methods.

The purpose of the Panel is primarily to obtain the personal views of the members. Statements presented here may or may not be expressions of company policy.

The Panel is conducted by mail and participants have no epportunity to compare notes or sharpen and define points of disagreement.

#### SUMMARY:

SMALL BUSINESS, always branded (among safety men) by its deplorable inverse ratio of accidents, gets an airing in this month's panel at the hands of one of its most sympathetic, and closest, professional groups—the accident prevention engineers of the liability insurance companies and industrial commissions.

Like Mark Twain's weather, everybody does a lot of talking about the sorry safety plight of small industry. Again and again, they review and compare the statistics on accident frequencies:

Panel participants here listed, perhaps as well informed as any group ever to discuss the vexing problem, advance the various reasons for existing conditions, such as lack of trained personnel, too many duties on the shoulders of small business executives, etc.

One factor on which they agree pretty generally involves the pocketbook: Small business thinks accident prevention effort is a luxury for big business—"just too expensive for us."

Solution of the problem, in the opinion of this group, lies in a better selling job on the part of all concerned, particularly on the part of insurance engineers and others most closely connected with the small industry accident cost problem.

The approach, they think, is to find the best way to convince small business operators of the economic wisdom of accident prevention.

But let the panel members speak for themselves:

Mr. Johnson:



Experience of the group of safety engineers with whom I am associated, indicates that the owners of small business are just as recep-

tive to helpful suggestions aimed to reduce accidents as are the managers of big business.

I think the fundamental reason

why small business does not accept much of the safety advice offered is that the advice is no good. Much of it is taken from big plant programs and warmed over to appear to suit small plant conditions.

Such recommendations must meet four critical tests as follows:

- 1. Purpose. Since in little plants (those up to 20 people) accident frequency does not mean anything, and small plants cannot afford to have a disabling injury oftener than once in a blue moon, the purpose of any safety suggestion is to remove a hazard which seems likely to be an accident potential.
- Approach. Little plants have no use for a shot-gun approach. Recommendations must be specific. The analytical process must evaluate the activities of the people engaged there.
- Method. Since the approach cannot be a glib "don't get hurt," but must be founded on analysis of operations, the method to correct a faulty operation must be an engineering method.
- 4. Principle. Since the small plant, just like the big plant, operates on principles of management which are universal, actions taken to carry out engineering methods for accident prevention must be founded on principles of management.

#### MR. HUTCHINSON:



Perhaps the most important reason is that small business fails to realize just how bad its accident record is. With the small

man-hour exposure, even infrequent accidents develop a large frequency rate by comparison with the larger plants. Yet, because the accidents do occur infrequently, they fail to create the proper impression—this particularly in view of the meage: records kept by most small operators.

If the men who are responsible for the operation of the smaller businesses can be convinced that accidents are reducing efficiency and costing money, they will more readily institute the activities necessary to prevent them.

The burden of convincing these men lies mostly with the insurance engineers who have the most frequent contact with them. The engineers, it would seem, could promote the keeping of more complete records.

#### MR. KALLENBAUGH:



Observing the lack of safety programs in many small plants through government inspection, the causes can be resolved into two

groups; (1) lack of knowledge on the part of small plant personnel with respect to modern safety methods, coupled with the diversity of activities required of management personnel, and (2) the general impression of small plants that they are unable to finance a safety program in line with those outlined for larger plants.

Little difficulty is experienced in securing compliance with the mechanical requirements of the Ohio Safety Codes, therefore, the establishment of a small plant program is a matter of education. Penalty and merit rating provisions of the law give one approach for such a program from the monetary standpoint.

No state agency or any other group can have a field force sufficient to contact all small business on a yearly basis. Therefore, other ways and means to create interest at local group levels are used.

Two methods for accomplishing this are:

- 1. Establishment of local safety councils wherein large and small business jointly form the council with group breakdowns in general manufacturing lines with comparable man-hours. Interest is created on a competitive basis within the group and plants with a better safety record assist other plants within their group. There is also keen competition between councils on yearly average frequencies. Sixteen councils made an average reduction of 32.3 per cent in four years. This reduction was not made in communities that were unorganized.
- Industrial groups carry similar manual rating. Safety programs on an industry-wide basis, therefore, can reduce the base rate of all industries in a given manual. State-wide indus-

try or association campaigns have produced a lowering of the manual rates for the industry through the same assistance program set up for local council groups.

The two foregoing methods have produced greater contact of small businesses and associations at less cost and with less manpower required at the central level than any other method we have experienced.

#### MR. BRAUN:



The small business manager or owner usually is the executive of all departments, which, in a larger establishment, are assigned to the

care of others. The small business manager is commonly his own foreman, production manager, and personnel manager. This makes it difficult for him to pay close attention to all details.

Therefore, the accident prevention problem is one that the small business manager neglects badly—if not entirely. When he purchases workmen's compensation insurance as prescribed by law, he feels that he has solved his safety problem.

He has no realization as to the cost of an accident. He reports his loss to his insurance company and feels that his worries are over. Seldom does he realize what his accidents and thousands of others in his particular industry classification will do to his insurance costs.

To add to the problems of small business, many employees in the smaller plants must, of necessity, perform jobs which are not a part of their regular assignment. Therefore, these employees need adequate instructions.

Good supervision and practical training in regular work are of paramount importance.

The problem is to get the small business manager to realize his own particular problems—the cost

-To page 189



# Congress Bound

By BILL ANDREWS

Sunday, October 7, 1951

In the last three days I have explained to at least 20 people why I go to National Safety Congresses, why they should go, and just how they act to get the maximum benefit from a Congress.

I have been very earnest and very intelligent about it all. I've told the foremen of our party to buy notebooks and fill them with copious notes. I've told Harry Dexter, my junior assistant, in great detail how he should exploit the sessions, the Exposition, the chance meetings in the lobby. That took an hour of lecturing.

I spent perhaps three minutes telling my senior assistant, Jim Mason, the specific things I want him to check, knowing darned well that he knew his way around well enough so that I didn't need to advise him.

Finally, to the brass that ranks me, I made my usual speech about why the Congress is worth the time of myself, my assistants and a large group of supervisors.

No doubt I've been eloquent. Perhaps, in my eloquence, I was also wise.

But now, sitting in the club car of a Chicago-bound train, I face the problem of what, really, I expect to get out of the 1951 Congress.

And, since I can be honest, I have to say I don't know.

Something may happen today at the Industrial Conference meeting, that will highlight a problem I'm thinking about. Somebody like Jacoby or Bill Yant or Frank Kelsey may suggest a useful train of thought.

Or it may be Max, my equipment-salesman friend, perched on the rim of an exhibit case, patting his fat belly like a Buddha, who might put his finger on the answer to one of the dozen headaches I've bulled about with him in the past.

There'll be somebody, I don't know who, to eat dinner with Sunday night and discuss this or that.

Monday there'll be the Annual Meeting, and oratory; I'll listen, because long experience with Congresses teaches me that, if I give way to my prejudices and flee at the first threat of a general safety speech, I may miss something quotable, informative or stimulating.

Then the routine starts — the series of days when you pick up the program at breakfast, look through the impossibly long list of papers to be presented, and select the two or three that hold the most promise—knowing darned well that the best paper I'll hear probably won't be one I chose, but one I stumbled onto while waiting for the one I chose to hear.

Maybe what I'll learn most from is one of the half-dozen tours of the Exposition Hall—but whether I will learn from seeing a new gadget or bulling with a salesman, or reading a piece of hand-out literature, I don't know.

There'll be executive committee meetings of the section, gabfests over many meals, speeches at the banquet, bull sessions with Council staff members.

Any of these may or may not be productive.

And so, this year at last, I come to the Congress having drawn elaborate plans for every other Jackson-Barnes employee who is attending—but sternly refusing to draw any detailed plans for my-

A Congress is a strange and wonderful thing. But it is also almost completely unpredictable despite the rigidness of the over-all pattern of its formal meetings.

Over the years Congresses have brought me more knowledge, contacts and ideas than any other similar expenditure of my time.

But if you ask me, this Sunday morning in the club car bound for Chicago, what I expect to do and learn, I can only shrug my shoulders and say, "I don't know."





# Luxury and Safety Afloat

By REAR ADMIRAL H. C. SHEPHEARD

All safety features known to marine engineering are incorporated in the new SS UNITED STATES

MERICANS are building a A ship which will give this country best representation on the sea lanes of the world it has had since the days of the clipper. Excelling in many respects over other ships of the world, it will have safety features which will make it the safest passenger or troop ship in operation anywhere. The ship is the SS United States. It was designed by Gibbs and Cox, christened at Newport News in June 1951, and soon will be placed in service as the new flagship of the United States Lines.

REAR ADMIRAL H. C. SHEPHEARD is Chief, Office of Merchant Marine Safety, U. S. Coast Guard, and Chairman, Safety Policies for Regulations and Ship Inspections Committee, Marine Section, National Safety Council. One of the safety features of the SS United States is the improvement in fire safety. This is due largely to the elimination of combustible materials. This feature is most evident in the public rooms and passenger staterooms. In the past it has been here that the fearful cry of "fire" at sea has earned its reputation as the forerunner of a major disaster.

On the SS United States all wood trim and veneers have been eliminated, and all draperies, upholstery and mattresses will receive a fire-retardant treatment. Every article of furniture must be constructed of fire-retardant materials. Where passageways pierce fire bulkheads, automatic fire doors are installed. All can be closed simultaneously from the bridge.

The SS UNITED STATES, new flagship of the United States Lines, recently christened at Newport News. Fire-resistant construction of hull and furnishings, modern fire detection and extinguishing equipment, waterflight, fire bulkheeds with automatic doors, and the newest in navigation devices are all designed to provide the utmost in safety for passengers and crew.

The structural fire protection built into the ship will in no way reduce the usual number of extensive detecting and extinguishing apparatus which will provide for the prompt extinction of any incipient fire.

Next to fire the greatest hazard at sea is collision. Although the SS United States will be equipped with the latest navigating instruments, designers, to limit the extent of flooding, have provided a subdivision of the hull unprecedented for a merchant ship. A flick of a switch will close all power-operated watertight doors penetrating the watertight bulkheads.

The lifeboats on the ship will be constructed entirely without wood. The many important safety features of the SS United States are too numerous to mention. Some, like the ship's powerful machinery and the strength of the hull itself, are the result of years of experience in ship design, ship-building and ship operation. In contrast, the electronic navigational aids, radar and loran are developments of the past few years.

The ship will carry 2000 passengers under conditions of unexcelled comfort in peacetime. Statistics indicate that a passenger traveling with the American Merchant Marine is enjoying the safest method of transportation available in the world today.

In the event of war, the SS United States will be converted into a troop ship, and the safety built into the original design will become an even greater asset to the American people.

# SAFETY VALVE

"See Us in Chicago"

THIS MONTH'S INSTALLMENT of The Diary finds Bill Andrew's fictional Safety Engineer on the way to Chicago for the 39th National Safety Congress and wondering what he'll get out of it.

The Safety Engineer (we never did learn his name) isn't worried about justifying the expense account and time away from the job. He's always been able to do it in the past. He's just wondering which sessions and speeches will produce those golden nuggests of knowledge and inspiration he knows he'll find.

That got me thinking, too. What will I get out of it?

After attending 27 Congresses, I know they will follow a rather definite pattern in the program and stage setting, yet always there's something new.

Like Bill's Safety Engineer, I never know where I'll find the nuggets. It may be in the keynote address at the Annual Meeting, or at one of the sectional meetings on my assignment list. I can count on a few from casual conversations in meeting rooms or the lobby.

Of course, an editor is always looking for manuscripts—meaty papers on topics of wide general interest, preferably with pictures. Leads for future articles are also part of the gold strike.

Sometimes ideas have delayed action fuses. A wise observation heard at the 1923 Congress banquet stuck in the back of my mind for 15 years and then popped out in an editorial.

And there's the pleasure of meeting folks—friends I've known for years, people I've corresponded with and meet for the first time, and others I've known only as the safety director for a certain company. This expanding circle of friendships is one of the benefits that grows with years on the job.

Weather for Congress Weeh: The Old Farmer's Almanac, which has proved almost as reliable as the official forecasts so far this year, isn't encouraging. Somewhere around the opening of the Congress the clear, cool weather prophesied for the first of the year changes for the worse: "No use fretting but you'll sure get a wetting." Winter, according to the Almanac, is due late in October, with no Indian Summer.

Oh, well, that forecast is chiefly for New England. Perhaps it will be different in Chicago.

### Salvaged Lives

THE WEEK OF THE NATIONAL SAFETY CONGRESS is also National Employ the Physically Handicapped Week.

In the past, the handicapped have received little but sympathy and charity. Now the problems of their rehabilitation are receiving attention from the medical, sociological and occupational points of view. It is good business to take advantage of their remaining skills to make them self-supporting and self-respecting, as well as to use them in the present defense effort.

The article, "Hope for the Handicapped," is particularly appropriate for this issue. Blinded in World War I, Colonel E. A. Baker was trained at St. Dunstan's, a world-famous institution for the training of the blind established by the late Sir Arthur Pearson, a British newspaper publisher who lost his sight in middle life.

Now managing director of the Canadian National Institute for the Blind, he is extending on this continent the methods and principles which have made St. Dunstan's famous in restoring to usefulness the sightless casualties of both war and peace.

In a not too literal sense these efforts are fulfilling the prophesy of Isaiah:

Then the eyes of the blind shall be opened

And the ears of the deaf shall be unstopped;

Then shall the lame man leap as an hart

And the tongue of the dumb shall sing.

### In This Issue . . .

Geographically, this issue takes quite a stretch of territory, from the timberlands of the Pacific Northwest to the banana plantations of Honduras. The hard hat in the woods is symbolic of general safety progress, comments Bill Andrews. (Page 89)

And down in the Caribbean lands, where the mosquito and the machete are outstanding menaces, United Fruit Company has been conducting constant war against disease and accidents. This crusade has helped to bring prosperity to rich lands formerly ravaged by malaria and yellow fever. (Page 92)

To insure built-in safety in a plant, the safety department should sit in on the preliminary planning. When Lever Brothers built their new Los Angeles plant, 30 years' safety experience went into the specifications. (Page 90)

Fire protection may be less picturesque than in the Currier & Ives era but it is much more effective. Along with better extinguishing equipment are devices which do not depend on human vigilance for early detection of fire. (Page 100)

Carman Fish



**Great White Fleet** 

-From page 93

in a minefield. Thus, the primary case is treated before secondary cases can develop, and the mosquito-breeding area is eradicated. Normally, the sanitary men make periodic visits to each farm and surrounding areas on a regular circuit, spraying vegetation, water puddles, canals and buildings, and checking on drainage and sanitation.

Field dispensers—something akin to the Army's "corps man" besides administering to simple needs of those on their farms, also make frequent house-to-house and room-to-room tours, keeping their eyes open for unreported sicknesses, lapses in maintenance of sanitation and other departures from accepted practices.

Besides its medical personnel on the farms, United Fruit also operates 13 modern hospitals, strategically located so that their facilties are readily available to anyone in the company's areas. The company's first hospital opened in Leading bananus for transportation to the nearest port for shipment to the United States. Benana bunches are padded with leaves to avoid business.

1900 in Nances Cay, just off Bocas del Toro, Republic of Panama. The latest addition is the 300-bed hospital in La Lima, Honduras, equipped with air-conditioned delivery and operating rooms and ultra-modern equipment throughout.

United Fruit realizes that it has to do more than provide medical care if it is to survive. Medical planners in the company felt that new disease cases could be drastically reduced and re-infection could be avoided to a large extent, if employees worked and lived in one area on a permanent basis. To implement this, big programs were ordered: construction of decent and adequate housing, establishment of schools and facilities for churches and recreation, commissaries and garden plots.

Concurrently, employees were getting an education in a sensible health program, disease prevention and safety measures. For the times, new concepts were developed: that screening houses, draining

-To page 144

Right: Visiting Nurse Miss Lydia Gorro, conducts a first aid class for youngsters at Golfito, Costa Rica.

Bislaw: Health programs in the tropics are increasing the chances of a child's reaching healthy maturity. Dr. Alfredo Sylva, medical superintendent at Golfito, checks up on a young patient who finds his stethoscope fascinating





### The Honor Roll

Records of operation exceeding 500,000 man-hours, or one year, if exposure exceeds 300,000 man-hours, without a disabling (lest-time) injury are invited.

American Cyanamid Co.

Mobile, Ala.—September 19, 1944 to April 1, 1951; 408,577 man-hours.

Armco Steel Corp.

Middletown, Ohio, East Works Plant—Following are departments with records of more than one million man-hours as of May 1, 1951, with date of beginning of record:

Plant Protection — September 1919; 2,412,958 man-hours.

Production—March 1923; 3,-546,382 man-hours.

Shipping—October 1948; 1,-131,255 man-hours.

Masonry—June 1947; 1,050,-225 man-hours.

Time Office—August 1924; 2,-205,917 man-hours.

Engineering — January 1923; 3,222,586 man-hours.

Industrial Engineering—December 1929; 3,101,926 man-hours.

Works Accounting—February 1929; 1,860,415 man-hours.

Metallurgical—July 1944; 1,-657,330 man-hours.

Power Sub-Stations — May 1937; 1.468.726 man-hours.

B. B. Chemical Co.

South Middleton, Mass. — May 16, 1950, through August 8, 1951; 396,932 man-hours; continuing.

Farley & Loetscher Mfg. Co.

Dubuque, Ia.—3,000,000 manhours as of August 13; continuing.

Flintkote Co.

Chicago Heights, Ill.—303 days; 1,017,395 man-hours.

General Foods Corp.

Birds Eye Plant, Mt. Morris, N. Y.—1,125,777 man-hours since November 1949.

Franklin Baker Div., Philippine Islands—January-June 1951; 1,-077,228 man-hours. The Hartford Electric Light Co.

Hartford, Conn.—February 9 to June 1, 1951; 545,448 man-hours.

Eastman Kodak Co.

Color Print Processing Dept., Rochester, N. Y. — July 1949 through June 1, 1951; 3,269,002 man-hours.

Hughes Aircraft Co.

Culver City, Calif.—June 19 to July 10, 1951; 992,263 manhours; July 17 to August 8; 1,-315,312 man-hours.

F. H. McGraw & Co.

Construction of AEC plant, Paducah, Ky.—62 days since June 6, 1951; 2,239,630 man-hours; continuing.

Martin-Parry Corp.

Toledo, Ohio—November 5, 1948, through July 31, 1951; 3,158,991.8 man-hours.

National Distillers Products

Corp

Louisville Div., Hill and Hill Plant—February 7, 1950, through July 31, 1951; 1,280,815 manhours; continuing.

Peoria Div.—September 23, 1950, through July 31, 1951; 815-092 man-hours; continuing.

Phelps Dodge Corp.

Morenci, Ariz., Branch—March 27 to June 3, 1951; 1,222,035 man-hours.

Quaker Rubber Corp.

Div. of H. K. Porter Co., Inc., Philadelphia—March 11 to August 31, 1951; 1,243,400 manhours continuing.

United States Rubber Co.

Scottsville Plant—September 12, 1946, to July 31, 1951; 2,917,725 man-hours; continuing.

Asbeston Plant—February 14, 1946, to July 31, 1951; 1,804,488 man-hours; continuing.

Winnsboro Mills — April 12 through August 10, 1951; 1,137,-893 man-hours; continuing.

United States Steel Co.

Clairton Works Coking Dept.— February 2 to August 6, 1951; 878,618 man-hours.

Clairton Works Open Hearth Dept.—January 8 to August 18, 1951: 683,992 man-hours.

Gary Sheet and Tin Mill—July 25 to August 22, 1951; 1,080,000 man-hours.

Vitreous Steel Co.

Nappanee, Ind.—January 24, 1949 to August 1, 1951; 622,968 man-hours; continuing.

Westinghouse Electric Corp.

Atomic Fower Div.—February 15 to July 31, 1951; 1,245,848 man-hours; continuing.

Kansas City Works—May 4 to July 31, 1951; 1,130,120 manhours; continuing.

Lima Works—March 15 to July 31, 1951; 2,513,807 man-hours; continuing.

Central District Manufacturing and Repair—February 3 to July 31, 1951; continuing.

### Red No Protection Against Color-Blind Hunters

What a hunter wears may be a matter of life and death, according to the American Optometric Association which has issued a warning on color blindness.

"To be sure you are seen by fellow hunters, wear a cap or jacket in a bold pattern of black and white," said Dr. Elmer M. Soles, director of the association's department of public information.

"Contrary to general belief, a bright color is not the best safeguard because about 140,000 licensed hunters are color-blind.

"Some part of a hunter's costume should contrast sharply with the mottled visual effect of the autumn landscape. Squares, bold stripes or circles best meet the requirements."

Color-blindness, according to Dr. Soles, is inherited and is five or six times as common among men as women.

# When Your Safety Program Goes Sour

By EDWIN E. GLOMSTEAD

MUCH has been written about how to set up a good safety program and how to make it click. But what are you going to do for a program that has won top honors from the National Safety Council and is now apparently going sour? You have ridden along month after month without a disabling injury, then suddenly there is a flurry of them -more in one month than you have had in a couple of years! It stuns you, you think the bottom has dropped out. It makes you wonder why, and most of all, it makes you stop to think.

Such a time calls for calm and collected thinking. There is an intense inclination to do something right away but there are certain things that should and should not be done. Instead of improving the situation you may only make it worse.

Before enumerating some of the suggestions to guide you, there are some assumptions:

- 1. You have a safety program.
- 2. You consider your mill safety record as having been good until now.
- ord as having been good until now.

  3. Safety is not something new in your organization.

In his association with one of Wisconsin's prominent industries, EDWIN E. GLOMSTEAD has known the elation that comes from winning national honors in safety and the gloom that comes when the safety record crashes. His comments should offer encouragement to those who are going through that slough of despond.



- 4. Top management and the rank and file are safety minded.
- Your organization belongs to the National Safety Council and uses its services.
- 6. Your supervisors are identified with local safety organizations.
  7. You have enlisted the help of
- your labor organization.

  8. You are constantly striving for good industrial relations with your
- 9. Your work place is a safe, clean place to work.

### Now for Action . . .

Here are some suggestions. There may be others but at least these will help:

#### 1. Face the situation.

Face it squarely, calmly and objectively. Last year your mill was on the honor rolls of the National Safety Council—now you are way down the list in your group. Don't try to pass the blame; instead, you are going to face the situation honestly because you want to correct it.

### 2. Don't lose your perspective.

You have had some accidents, but were they serious? If they were, couldn't they have been worse? Remember the lucky breaks, too, in the past when a split second prevented a lost-time injury. There is some luck in a safety program, no matter what many people believe, simply because human nature is what it is. But, you are not going to hide behind that alibi. However, there is no cause for panic either. Don't be stampeded into feverish, futile misguided actions, even though you are pressed.

Maybe as yet you haven't received a very pointed letter or order from the top brass demanding instant action. You will—for that's their job, and don't resent it. But don't break out in a rash with a lot of half-baked schemes. Your program is not going to pot over night although it looks like it has already. You know that it takes years to build a good safety program because human nature is slow to change. And, being slow to change.

### 3. Don't be a turner-upside-downer.

If you see a worker not wearing goggles or you see evidence of horseplay and unsafe practices, guards not replaced, sloppy housekeeping, etc., don't start raising

-To page 199

### THE ACCIDENT BAROMETER

Prepared by the Statistical Division, National Safety Council

ACCIDENTAL DEATHS in June totalled approximately 7,800, an increase of 3 per cent over 7,600 in June last year. A large increase in motor-vehicle accident fatalities was partially offset by a small decrease in deaths from public nonmotor-vehicle accidents and a moderate decrease in deaths from home accidents. Deaths from occupational accidents numbered about the same as last year.

The six-month death total was 44,900, an increase of 5 per cent over 1950. All classes showed some increase with the largest change recorded in motor-vehicle deaths and the smallest in home accident

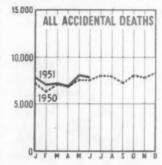
fatalities

#### Motor-Vehicle Deaths

There were approximately 3,080 deaths from motor-vehicle accidents in June, or 18 per cent more than occurred in June last year. Compared to 1949, it was an increase of 30 per cent.

Deaths during the six months totalled 16,320, an increase of 8 per cent over 15,120 in 1950. The death rate per 100,000,000 vehicle miles for the first half of 1951 was the same as last year-6.8.

Of the 44 states reporting for six months, 11 had fewer deaths than in 1950, 2 had the same number, and 31 had more deaths. Cities with populations over 10,000 reported an increase of 19 per cent for June and 5 per cent for the first half of 1951.



	1951	1950	Change
June	7,800	7,600	+3%
Six Months	44,900	42,600	+5%

Regional changes from 1950 in the six-month death totals were:

North Atlantic	+ 6%
South Atlantic	+ 4%
North Central	+ 5%
South Central	+ 2%
Mountain	+13%
Pacific	+24%

### Occupational Accidents

June deaths from occupational accidents numbered about the same as in June last year-1.400. The January-June death total was approximately 8,200, an increase of 6 per cent over last year's comparable total of 7,700.

The June frequency rate per million man-hours in seven sectional accident prevention contests conducted by the National Safety Council was 6.18, about the same as last year. The June rate for plants in community council interplant contests was 7.35, an increase of 2 per cent over 1950. The six-month rate in sectional contests was 6.68, no change from last year, while in community council contests the rate was 8.38, a reduction of 17 per cent.

#### **Public Deaths**

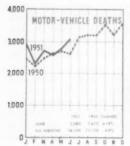
Public non-motor-vehicle accidents in June resulted in approximately 1,700 deaths, or 100 fewer than in June, 1950.

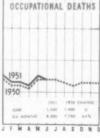
Deaths during the six months totalled 7,200, an increase of 7 per cent over last year. Moderate increases occurred in deaths from falls, firearms accidents and transportation accidents. There were small reductions in fatal burns and drowinings. Increases were reported for children under 15 years of age and persons 45 to 64 years old. A small decrease was recorded for young people 15 to 24 vears old.

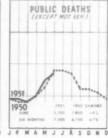
#### **Home Deaths**

Deaths from home accidents numbered about 1,800, a reduction of 10 per cent from June. 1950.

The January-June total was 14,300, an increase of 1 per cent over 14,200 last year. Small increases in deaths resulting from falls, burns and firearms accidents were nearly offset by a sizable reduction in fatal poisonings. Mechanical suffocation deaths numbered about the same as last year. A large increase occurred in deaths of children 5 to 14 years and small increases were recorded in deaths of children under 5 and persons 65 years and over.











### Paul Bunyan's Nephews

-From page 89

toughest logging operation—they are building the future timber as they take today's. And they are taking timber at an ever-diminishing cost in human blood.

Dan Adair, the National Safety Council's engineer in the wood products field, and I spent three days recently high on the West Coast hills of Oregon and Washington, visiting operations of three different logging companies. And if you think logging's gone soft, mister, you can have all the hard stuff you want!

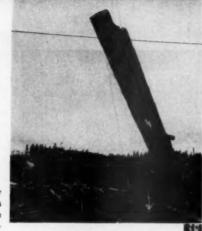
We went up 4,000 feet back of Molalla, Oregon, into the cold fog and drizzle that almost perpetually sops the high ground there. We were on Crown-Zellerbach land, and Crown's Molalla camp is perhaps degenerate—if you mean by degenerate that the cook shack is clean and that most of the men can live normal family lives instead of the bachelor existence of the bunk house.

First thing that hits you as you head into the hills is the quality of the roads. Molalla is on a sustained yield basis—trees are growing as fast as they are being taken. But sustained yield means more than leaving the land alone to regenerate. It means planting and fire protection, and fire protection means a network of roads—good ones.

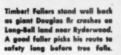
Up in the blank fog, on the 40 degree slopes, we saw the high lead rigs yarding in the logs ("yarding" is the process of pulling the logs in from the spot where they fall to the landing, the point at which they are loaded on to some form of road or rail transportation.)

Handling material in a logging

—To page 154



logs which have just been yarded in by electric skidder. Photographic perspective makes him look perilously class, but this Long-Bell man is in the clear. Note the hand signals.





Fallers making undercut as same tree, using power saw. Sure feeting is a most, but not always easily come by in rough terrain. Note in all pictures the hard hots.



Bucker undercutting a tricky log (see text). Back of saw is supported by handle of axe driven solidly into the log.



Access to tank tops is afforded by stairways leading to platforms equipped with handrails and toeboards.

### Before the Blueprints

-From page 91

Building interiors are protected by automatic sprinklers and inside hose outfits. First-aid fire extinguishers are of the latest types. Outside protection is furnished by yard hydrants and hose houses and mobile fire fighting equipment, manned by the plant fire brigade is kept in a central fire house.

Complete protection has also been included for the two spray towers - large seven-story high cylinders in which the soap or detergent slurry is dried at high temperatures. Fixed temperature thermostats, rate of rise fire detectors, a water deluge system, automatic dampers, dust collector sprinklers, automatic furnace controls, etc., all are designed either to prevent fire, or to cope with one should it occur. To provide against the remote possibility of explosion within the tower, relief doors have been provided so that excess pressure would be vented safely to the atmosphere outside the building.

The electrical work includes local disconnect switches at ma-

chines for the protection of mechanics. All electrical equipment in areas where there might be combustible vapors or dusts is explosion-proof, and of a type approved for the specific hazard. All convenience outlets are the threewire, grounded design which prohibits the use of ungrounded portable electrical tools, etc. Receptacles along tank car walkways for extension lights are on a sixvolt circuit to provide maximum safety.

Guarding of machines has been complete. All prime movers and mechanical power transmission equipment, such as couplings. belts, gear and chain drives, are guarded in accordance with ASA Code B-15, Mechanical Power Transmission Apparatus. Bench and floor stand grinders are guarded to meet the requirements of ASA Code B-7, Use, Care and Protection of Abrasive Wheels, and are equipped with shields with built-in illumination. Screw convevor covers are locked or bolted in place and openings protected by grilled hoppers. Bolted grilles are also provided in any tank manholes where there is a possibility of accidentally falling in.

Elevators, too, are designed for safety. They are of the traction type, self-leveling and are in accordance with the requirements of ASA Code A17.1, Safety Code for Elevators, Dumbwaiters and Escalators, and all have electrically interlocked doors. Stairways have been laid out with the utmost of care, the frequency of stair acci-

-To page 187



Where machines were not adequately guarded by the manufacturer, moving parts have been completely enclosed by substantial guards.



Above the Flooded River. Poised a few feet above the swirling flood, a telephone repairman tests a cable on a bridge between Kansas City, Kansas, and Kansas City, Missouri, while his companion uses a walkie-talkie to co-ordinate repair work. In other places, telephone men were forced to take to boats.



Meeting the Emergency. Telephone people not only worked valiantly to restore service but to keep it going. Dikes were thrown around telephone offices. Switchboards raised above rising waters. Emergency power plants set up. Mobile radio telephones rushed to towns where telephone offices were washed out.

## FIGHTING THE NATION'S COSTLIEST FLOOD

From the flooded sections of Missouri, Kansas and Oklahoma have come stories of the loyalty, skill and courage of telephone people in one of the Nation's worst floods.

Many returned from vacations to help. In one town, a single radio appeal for former operators brought twice as many as were needed. Hundreds of trained telephone people from other states were rushed to the scene to help their fellow workers.

Once again the Western Electric Company

the Bell System's manufacturing and supply unit — proved its value in an emergency.

By plane, fast freight and truck it rushed millions of feet of cable and wire, telephones, switchboards and other needed equipment.

No one can tell when or where such emergencies will occur, but the Bell System has to be ready and able to handle them when they happen. That means financially able as well as physically able.

This points up again that it takes a financially strong telephone company, with a strong supply organization like Western Electric, to give the Nation the service it requires.



### Flying to the Flood Front.

Part of one hundred Long Distance operators who were flown from New York, Louisville and Chicago to Kansas City, Missouri, where a flood of calls followed the flood of waters. With traditional Bell System speed and teamwork, they pitched in to help at busy switchboards in the stricken areas.



BELL TELEPHONE SYSTEM

# In TOE SAFETY ...

# it's the INSIDE

We concede that no safety box toe can be made regardless of its basic steel, its gauge, or its profile that can not be collapsed by unusually extreme striking force. As we see it, the job of a steel safety box toe is to reduce as far as possible the potential of the accident — to be so protective as to cause an important percentage of amputations to become fractures, and fracture cases to become abrasions, and in innumerable instances of lesser accident save the wearer from as much as a bruise. Since the best steels are already in use and since increased gauge means wearer discomfort from weight, only architectural improvement can make steel toes safer. Toes that resist back-tipping — that buttress the toe dome under extreme toe-spring — that present greater bearing surface against the shoe upper in resisting lateral spreading — may well mean the difference between minor and serious injury to the wearer. Such toes are available to your safety shoe supplier. They are known as WINGUARDS.



FOR SAFETY DRESS SHOES Sizes 5 to 12, B and D widths.

FOR SAFETY WORK SHOES Sizes 5 to 14, D width only.

# story that counts



# WINGUARDS safest steel box toes

SAFETY SHOE MANUFACTURERS LICENSED TO USE WINGUARD STEEL SAFETY BOX TOES as of July 1, 1951



Allen-Squire Co. Spencer, Mass. Balleville Shoe Mfg. Co. Curtis Shoe Co., Inc. Charles A. Eaten Co. Endicatt Johnson Corp. General Shee Corp. Joseph M. Herman Shee Co. Hill Bros. Co. Holland-Racine Shees, Inc. International Shee Co. Knopp Bros. Shoe Hig. Corp. Leveronz Shoe Co. J. F. McElwain Co. Milwaukee Shee Co. Museback Shee Co. Oconomowoc, Wisco A. H. Weinbrenner Co. Welverine Shee & Tenning Corp. Rockford, Michigan

### CANADA

J. A. Blais, Inc. St. Cesaire, P. Q. G. A. Boulet, Limited Canada West Shoe Mfg. Co., Ltd. J. A. & M. Cote, Ltd. Beoust, Lalende, Inc. Montreal, P. C. Frontonac Shoe Ltd. The 6 and 8 Shoe Co. Grob Shoe Co., Ltd. Hydro City Shoe Mfrs. Ltd. Paimer-McLellon Shee Co., Ltd. Fredericton, N. B. The T. Sisman Shee Co., Ltd. The Stay Shoe Co., Ltd. Storling Bros., Limited Tetrault Shee Ltd. Montreal, P. Q. The Tillsonburg Shee Co. Tillsonburg, Ontario Underkills' Limited Barrie, Ontario Valentine & Martin Ltd. Williams Shoe Ltd.

### SAFETY BOX TOE COMPANY 812 Statler Office Building Boston 16, Massachusetts

subsidiary of
Beckwith Manufacturing Company,
Dover, N. H., sales agents for the
United States. Canadian sales agents.
Beckwith Box Toe Id., Sherbrooke, P.Q.

# NOW

# 100% Serrated SAFETY GRATING BY A.O. SMITH



After 10 years' experience designing and building safety steps and running boards for railroad cars, A. O. Smith now offers you a 100% serrated safety grating. Both bearing and cross bars are serrated for 100% non-slip safe footing under all conditions.

Ask your purchasing agont and engineering departments to get the details on this grating that assures maximum safety in your plant.

Floor grating a Stair treads

Catwalks a Trenching a Manways

Running boards

# A.O.Smith

District Offices: Chicage 4 - Dellas 2 Houston 2 - Los Angeles 22 - New York 17 Pittsburgh 19 - Tulsa 3

		send me com your Safety
Name		
Firm		
Address		
City	Zone	State

## **Industrial Health**

Abstracts of current literature on Industrial
Hygiene, Medicine, and Nursing
By F. A. VAN ATTA, Industrial Department, NSC

### Report on Treatments For Common Cold

Symptomatic Treatment of the Common Cold, by Ronald Forbes Buchan, Alfred E. Gras and Frank H. David. The Archives of Industrial Hygiene and Occupational Medicine 4:32-42 (July, 1951).

Because the common cold is the greatest single cause of lost time in all occupations it continues to be the subject of a great deal of study in industrial medical departments in an attempt to evaluate proposed methods of treatment and prevention.

In this instance employees of the home office of the Prudential Insurance Company of America were subjects of an experiment to evaluate the use of antihistaminic drugs as compared to a more customary aspirin-acetophenetidin-caffeine mixture and as compared to an inert placebo.

Individuals reporting to the health service were given a threeday supply of the appropriate medication with instructions as to how it was to be used. They were asked to fill out a form indicating the condition which they had when they reported to the service, the length of time they had had the symptoms which they reported and their history of frequent colds or various allergies.

They were also asked to fill out a report for each day on which they took the medication indicating how much they had actually taken on each day, what, if any, other medication was taken and which ones of their symptoms improved, became worse or disappeared on that particular day. At the end of the three days they were asked to report back for a second interview at the health service.

During the period from November 1949 to May 1950, 5,921 cases

of common cold were seen in the medical service and of these the data from a total of 2,865 cases were analyzed. The others were excluded either because they did not wish to participate in the study or because the data was not sufficiently complete for analysis.

The results showed that about 10 per cent more individuals reported being relieved from their cold on the first day by the anti-histaminic agent than reported being relieved on the first day by the placebo. The difference decreased with time and was negligible by the third day. The anti-histaminic agent had a 6 per cent advantage over the aspirin-phenacetin-caffeine combination on the first day and the difference became negligible on the third day.

There was no difference among the medications in the amount of time lost due to colds.

Records were kept hour by hour at the beginning of medication. There was no significant difference between the antihistaminic agent and the placebo in the group in which medication was begun 1 to 3 hours after the symptoms of the cold were first seen. There was no consistent significant difference among any of the types



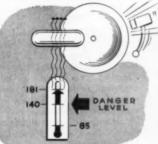
# Rate Compensation

A New Principle of Fire Detection

Fenwal DETECT-A-FIRE horizontal mount combines
unique operation with smart design









# THE SHELL REACTS!

Fenwal DETECT-A-FIRE unit, activated by its temperature sensitive shell, responds only when the temperature of the surrounding air reaches predetermined danger level.

Do Away With . . .

### TIME LAG

In fixed temperature detection the air temperature rises well above the danger level because of time needed for the device to absorb heat before responding.

### FALSE ALARMS

In rate-of-rise type detectors calibrated to operate at a predetermined rate of temperature rise, false alarms may occur even under non-fire conditions.

#### New

RATE - COMPENSATION principle assures positive fire detection for plants, ships, institutions, all commercial, mercantile and public buildings.

Visit our Booth 603 at the Chemical Industries Exposition, Grand Central Palace, New York



### FASTER—SAFER— ELIMINATES SPLICING

Millions in daily use prove Safe-Line the right way to hold wire rope securely. It's the better way, too!

Better because Safe-Lines are faster than splicing and serving, or using U-bolts.

Better because Safe-Lines outpull the strongest rope, hold a tight thimble, minimize rope or sling breakage.

Better because Safe-Lines are easy to use and re-adjust, without special tools or skilled labor.

Better, too, because Safe-Lines enclose sharp wire ends, preventing personal injury and mental hazards.

Try this better way that saves you time and money.

Approved BY UNDERWRITERS' LABORATORIES AND CIVIL AERONAUTICS ADMINISTRATION



FORGED AND MASTER COINED TO FIT ROPE SIZES 1/6" TO 3/4"

Safe-Line double spiral splines fit each wire and strand, providing a powerful grip, without cutting action to the rope. Replacement guarantee on clamp against breakage and fracture.

WRITE FOR DESCRIPTIVE PRICE-LIST FOLDER

NATIONAL SAFE-LINE CLAMP CORP. 11252 NINE MILE ROAD VAN DYKE, MICHIGAN of medication in any of the groups up to the one which received its first medication 72 hours after the first symptoms of the cold were observed.

There were no troublesome side reactions from the taking of the antihistaminic agent.

The combination of the antihistaminic agent and the aspirinphenacetin and caffeine combination was no better than the antihistamine alone and the aspirin-acetophenetidin-caffeine compound produced no more observable effect on the cold than did the placebo.

### **Employee Health**

Indiana Physician Reports on Five Years of Experience With Employee Health Service, by Louis W. Spolyar. The Industrial Health Monthly 11:115-116 and 119 (August, 1951).

The Indiana State Board of Health started an employee health service in January, 1945. The original program called for preplacement examination of new employees, medical care of occupational injuries and diseases, immunization programs and toxicological consultations to all bureau and division directors of the State Board of Health.

The service covers 425 employees, of whom about 60 per cent are women. During the five years there have been 447 complete pre-placement examinations which resulted in only one rejection of an employee. The State Health Department has hired 17 individuals with arrested tuberculosis, 3 with diabetes, 5 with heart diseases, 10 with hypertension and 3 with severe paralysis from poliomyelitis. An epileptic and a deaf mute have also been hired and all have been placed on jobs with which they can cope.

Chest films of all employees have found 4 active cases of tuber-culosis as well as some other serious chest conditions and have lead to the belief that the periodic x-rays should be done every six months routinely.

There have been 16 compensation cases in this group in the five-year period.

This service was set up in the Industrial Hygiene Division of the Health Department and has been used as a sort of laboratory for trying out medical service techniques. During the five years the record system was changed three times, the eye testing procedure four times and the drug list four times and the physical arrangements were completely revised twice to improve the privacy and flow of work.

From the point of view of the physicians in the health department it has had the advantage of giving them first-hand experience with the problems which a plant physician has to deal with every day as well as putting the health department in the position of doing the thing which it tells the industry should be done. This particular service has been certified by the American College of Surgeons as properly staffed and operated to produce an adequate medical service for the employee.

### Better Vision Congress To Meet in Atlanta

Better vision programs as a tool for gearing up defense production and reducing man-hour loss will be stressed at the 4th annual Occupational Vision Congress at Georgia Tech in Atlanta, October 4 and 5.

Nationally-known figures in the industrial and professional fields will be presented in talks on conservation of vision, safeguarding the eyes from injury and the proper seeing environment for maximum employee efficiency.

Speakers at previous congresses have reported increases in production by as much as 20 per cent, lowered absenteeism of 35 to 50 per cent, and half as many accidents as a result of vision programs.

The 1951 congress will be sponsored by the Engineering Extension Division, Georgia Institute of Technology; the Associated Industries of Georgia, the Cotton Manufacturers Association of Georgia; the Georgia Industrial Nurses Association; The Georgia Optometric Association, the Georgia Society of Ophthalmology; the Industrial Hygiene Division, Georgia State Health Department; and the Illuminating Engineering Society.

air you breathe Clean as a Whistle

WITH

COVER'S

U.S.B. of M. APPROVED Respirators



### DUPOR no. 24

U.S.B. of M. approved for type A dusts. 24 sq. in. twin filters,

Write for full information on the complete line of DUPOR Respirators and H. S. Cover Gas-Tight, Fog-Proof GOGGLES

# HERE'S HOW.



## M&M RAIL CLAMP helps reduce unloading costs

- HOLDS CAR WHEELS FAST-stops danger of costly derailments and lost time accidents
- SAVES TIME—can be put in position in one quick operation—no ties, blocks or shims necessary.
- LONG LASTING SERVICE even under tough conditions because it's cast steel; lug and wedge are highest grade drop forgings.
- A COMPACT, COMPLETE UNITno chance of parts being lost. Wedge is attached to clamp with strong steel chain. Sturdy handle makes carrying ensier
- MADE IN TWO SIZES-to fit gny rail, worn or new-Model A-40 to 100 lb. rails; Model F-110 to 175 rails.

SAFETY FIRST SUPP COMPANY

### PERSONALS

Election of CAPTAIN EDWARD C. HOLDEN, JR., as a vice-president of the United States Protection and Indemnity Agency has been announced by Carl P. Kremer, president of the Agency.

Captain Holden, a past general chairman of the Marine Section, NSC, has been with the Agency since 1930. He has headed its marine safety program for the assured of the companies represented by the Marine Office of America.

During World War I he served in the Navy. He is a survivor of the U.S.S. Covington, Naval Troop Transport, sunk by a German submarine off the coast of France. He later served as assistant navigator of the U.S.S. Texas of the 5th Battle Squadron fame.

In the American Merchant Marine, he served through the grades with the Isthmian Steamship Company of the U.S. Steel Corp., progressing from 4th mate to master and seeing service on ocean trade routes throughout the world.

During World War II, Captain Holden help top administrative and combat commands with the United States Navy in overseas service, ashore and afloat. He was awarded the Legion of Merit with Combat "V" for meritorious service against enemy forces during amphibious assaults throughout the Philippine invasions and at Okinawa while serving as commanding Officer of the U.S.S. Starlight. Following the successful conclusion of the Okinawa operatransport of the Pacific Fleet. Captain Holden is president of The Council of American Master Mariners; and Past Commander Marine Industries Post, American Legion. He is a member of The Maritime Association of the Port

tion, Captain Holden was ordered

to commission the U.S.S. Admiral

Wm. S. Sims, a 25,000 ton super

of the Robert L. Hague Merchant of New York; the Propeller Club of the United States; the Society of Naval Architects and Marine Engineers: the American Society of Safety Engineers; the Reserve Officers Association of the United States; and The Marine Society of the City of New York.

W. C. LARAWAY has been appointed supervisor of safety for the Delaware and Hudson Railroad Corp. with headquarters at Albany, N. Y. He succeeds the late M. F. Clune.

Mr. Laraway has had 28 years of service with the railroad, starting as clerk in the car department at Oneonta and later was foreman there. After 37 months' service in the U.S. Air Force he returned to the railroad as chief clerk in the Safety Department. He was appointed safety agent in March,

Inter-American Safety Council announces that W. T. ROCERS. safety consultant, Ebasco Services Incorporated, has been made managing director of the Council. Mr. Rogers succeeds CAPTAIN J. N. PARROTT who has retired because of ill health.

Inter-American Safety Council was formed in 1938. Its membership is comprised of over 200 companies-industries of all types including transportation such as railroads, steamship lines, airlines, tramways and bus lines. The industrial members alone employ more than three and a half million persons.

Inter-American Safety Council is affiliated with the Safety Committees of Santiago, Chile: Barranquilla and Bogota, Colombia; San



Capt. E. C. Holden



From one end of the oil country to the other, McKay Chain is at work helping hit pay sands. But then-you'll find McKay Chain everywhere doing the useful jobs of lifting, hauling, rigging, tying, spinning and other material and power transfer applications.

In every industry-there is a McKAY CHAIN FOR EVERY USE . . . no job is too big, none too small!

- McKAY CHAIN BULLETINS

   Sling Chain General-Purpose Chain

   Oil Country Chain Tractor-Truck Chain
- Write for the bulletins you need.



for Every Use

MCKAY-A GOOD NAME FOR GOOD CHAIN-SINCE 1881





They ll give your workers 100% protection plus dollar-saving wear. Made of the finest quality base fabric, coated both sides with genuine DuPont Neoprene Latex. Sawyer aprons are completely rotproof...not affected by grease, oil or gasoline. Highly resistant to acid solutions and to rubbing, scraping, snagging.

Also available: Complete Industrial Suits, Three Quarter Length Coats, Long Contractor's Coats.

Illustrated folders and prices on request.

The H. M. SAWYER & SON CO. Cambridge 41, Mass. Jose, Costa Rica; Guatemala City; Panama City; and Lima, Peru.

Officers of the Council are: President, R. J. Farlow; secretary and treasurer, American & Foreign Power Company; 1st Vice-President, G. P. Sawyer, vice president. Cerro de Pasco Copper Corp., 2nd Vice-President, R. A. Hummel, president, Lone Star Cement Corp., Treasurer, K. B. Sprague, Comptroller, American & Foreign Power Company, Secretary and Vice-Treasurer, Pedro M. Rincones, supervisor of training, Creole Petroleum Corp.; Legal Consultant, David E. Grant, Exselsen & Rorer; Managing Director, W. T. Rogers, safety consultant, Ebasco Services, Incorporated.

WILLIAM A. TROY has been appointed safety director of the Walter G. Legge Company, Inc. He will take complete charge of safety policies at the company's new plant in Peekskill, New York, as well as its Brooklyn plant and New York City headquarters.

Mr. Troy is a graduate of Holy Cross College and the Harvard Graduate School of Business Administration where he majored in industrial engineering. During World War II he served for three years in the United States Ordnance Department in Europe. He has been a safety engineer with the Legge Company since 1948.

A. H. KELLIHER has been named safety director for The



A. H. Kelliher

Manufacturers Light and Heat Company. He has been a staff member of the company's employee relations department for the past six years. He will also direct the safety program of the associated gas companies that



W. H. Adams

make up the Pittsburgh group of the Columbia Gas System.

Mr. Kelliher succeeds W. H. Adams who retired recently after 46 years with the company and has become a staff member of the American Gas Association. For many years he has been a member of the executive committee of the Public Utilities Section, NSC, and has held several sectional offices.

### A. H. NUCKOLLS

Asa H. Nuckolls, for many years chemical engineer for the Underwriters' Laboratories, Chicago, died August 31 at his home in Wheaton, Ill. He was 70 years old.

Mr. Nuckolls was a graduate of Ouachita College in Arkansas and also studied at Massachusetts Institute of Technology and the University of Chicago.

He was chemist for Illinois Steel Company from 1905 to 1907 and chemical engineer from 1907 to 1946. Since then he had been a consulting chemical engineer.

Surviving are the widow, a daughter and a son.





### MERCUROCHROME'

IN. W. & D. BRAND OF MERBROWIN DIRROMOXYMERCURIFLUORESCEIN-SODIUM

Do not neglect wounds, however small; even scratches and small cuts may become infected if they are not promptly and properly treated.

'Mercurochrome' (H.W. & D. brand of merbromin, dibromoxymercurifluorescein-sodium) is one of the best antiseptics for first aid use. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association for this purpose.

The 2% aqueous solution is not irritating or toxic in wounds; minor injuries are reported more promptly when 'Mercurochrome' is the routine antiseptic, because treatment is not painful.

'Mercurochrome' solution keeps indefinitely; the color shows where it has been applied.

Physicians have used 'Mercurochrome' for more than 28 years.



Be sure to include 'Mercurochrome' in your first aid supplies.

Reg. U. S. Pat. Off.

HYNSON, WESTCOTT & DUNNING, INC.

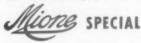


D BALTIMORE, MARYLAND



### or others belonging to your workers

HANDS are a very valuable part of your production line. Also the most vulnerable. Give them the added protection available today in . . .



Containing G-11\* (Mexachlorophene)

The G-11 (Mexachlorophene) incorporated in MIONE SPECIAL, when used in normal washups, will greatly reduce the bacteria on the skin. This antiseptic-germicidal action . . .

Reduces the occurrence of dermatitis Reduces the danger of skin infection Reduces the hazard of communicable diseases Prevents the spread of skin infection

Prevents the spread of skin infection Saves you man-hours and money by cutting down illness and absenteeism

An extra dividend of safety and health is incorporated in MIONE SPECIAL. It has all the dirt-chasing and grime-removing properties that you have always found in MIONE products, and its cost per scrub-up is comparable to any powdered hand soap marketed today.

You awe it to yourself, your employees and your company to investigate the advantages of using MIONE SPECIAL in your washrooms.

Write us for the name of the MIONE supplier in your area.

\*Trade mark of Sindar Corporation



## Mine Disaster of 1922 Dramatized on TV



TV program marked opening of B. F. McDonald Company's new plant. Actress Gwan Caldwell cuts shootting symbolic of opening within an easist from Ted Mayers, Mc. Looking on are Oil Man Glenn McCarthy and B. F. McDonald.

A MINE DISASTER of 1922, which claimed the lives of 47 miners, was dramatized recently on a one-hour television show celebrating the opening of the new safety equipment plant of B. F. McDonald Company in Los Angeles.

On the night of August 27, 1922, fire broke out in the shaft of the Argonaut gold mine near Jackson, Calif., trapping 47 miners at the 4,200 and 4,600 foot levels. For 18 days and nights efforts were made without success to extinguish the fire and reach the trapped men.

As a last resort, the rescue team drilled from the neighboring Kennedy shaft 700 feet through muck and rock. For the last lap of the rescue operations they brought out their crude equipment—bulky oxygen tanks and canaries for detecting carbon monoxide in the air.

At the working levels they found the bodies of the victims behind hastily erected barricades with clothes stuffed into the chinks in a futile attempt to keep out the deadly gas.

B. F. McDonald, head of the company which bears his name, captained one of the Bureau of Mines rescue teams. It was during these strenuous days that the idea for a company to develop and manufacture safety equipment was born. The title of the show, "The Little Man Who Wasn't There," was suggested by the company's trademark emblem.

Interviews with prominent safety men and demonstrations of various items of safety equipment were included in the telecast. The dedicatory address was by Glenn McCarthy, prominent oil man and owner of the Shamrock Hotel in Houston, Texas.

The narrative presented in the script was compiled from yellowed newspaper clippings of 1922. Combining these facts with actual photo slides taken at the surface of the mine and below, the script writers were able to produce a realistic narrative of the rescue operations.

Television recordings of the show have been shown before numerous safety groups.

### Save with Safety!

Order these quality lenses direct!

# PENDPTIC

### INDUSTRIAL LENSES

Cut your costs by ordering these quality lenses direct from one of America's most experienced lens makers. Penoptic Industrial Lenses exceed all Federal Specifications. You can depend on their quality... and save!

A Complete Line
PENOPTIC' WELDING LENSES
PENOPTIC' SAFETY LENSES

Write for folders and price lists

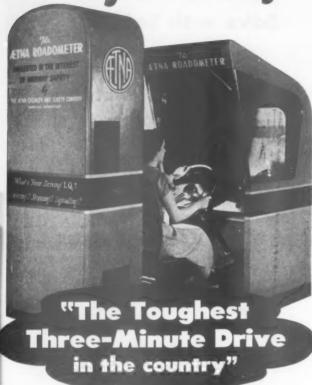
Order direct from the maker

PENNSYLVANIA OPTICAL COMPANY

Known for Fine Ophthalmic Products Since 1886

\*PENOPTIC is the trade name of Ponnsylvania Optical Company,

Coming to Chicago...



See and try the spectacular new Roadometer at Ætna's Exhibit at the National Safety Congress, Hotel Stevens, October 8-12

"Nothing else like it!" . . . "Best yet!" ... "What a workout!"... "A ride every motorist should take!"—say those who have pitted their driving skill against the Roadometer's "mechanical brain."

The result of fourteen years of continued research, the Roadometer has been widely acclaimed as the most advanced driver-testing device yet developed.

Taking in nearly every phase of motor vehicle operation, the Roadometer tests you for steering, braking, speeding, signaling and use of horn all in a single continuous test. Realistic motion pictures take you over the hazard-packed route while the "mechanical brain," through its unique pointscoring system, records your driving proficiency on an automatically-printed score card given each person at the end

The Roadometer is the latest addition to Ætna's impressive array of educational devices designed to make safety lessons sink in and stick. While you are at the Congress, be sure to 'drive" the Roadometer yourself and to talk over with Ætna's representatives the many facets of Ætna Loss Prevention Service which can be valuable to you in your work.

### ÆTNA CASUALTY AND SURETY COMPANY

The Ætna Life Affiliated Companies write practically every form of insurance and bonding protection LIFE AND CASUALTY FIRE AND MARINE Ætas Life Insurance Company
Ætas Casualty and Surety Company

Harriand 15.

## Automobile Insurance Company Standard Fire Insurance Company

### Water Supply Vital In Civil Defense

Water, where to get it, how to get it, and how to keep it flowing is the number one problem in wartime fire-fighting, the Federal Civil Defense Administration has pointed out. The Federal agency tackles this problem in a new manual, Water Supplies for Wartime Fire Fighting, which has been sent to state and local civil defense offi-

When an attack comes, survival or disaster for millions may rest on two things-keeping in service as much of the public water supply system as possible, and providing auxiliary water supplies, separate from the public water system, for fire fighting.

The manual makes suggestions for maximum operating efficiency of the public water supply system, and outlines what should be done for its protection, improvement and maintenance. It tells of procedures for emergency operations and the need for safeguard from sabotage.

The great fires in Germany and Japan during the last war taught us one thing. Our public water supply could be exhausted or rendered ineffective in a short time. In Tokyo efforts to combat fires were futile 30 minutes after the first bomb dropped. Water mains in Hamburg were broken in 847 places by high-explosive bombs, and its water system completely disrupted, in spite of good preattack planning.

Auxiliary water supply sources, such as oceans, lakes, rivers, ponds, streams and wells, and even private water supply systems in public and private institutions, industrial and commercial plants, must be utilized. Technical means of doing so are outlined in the manual.

As in all civil defense operations, there will be need for volunteer help, trained to act in emergency, and equipped with the necessary tools.

The National Board of Fire Underwriters furnished much of the material in this manual. It is for sale to the public at 10 cents a copy and can be obtained from the U. S. Government Printing Office, Washington 25, D. C.

we've stripped Your industrial apparel problems down bare facts:

Here it is, straight from the shoulder:

We scrapped traditional thinking. started from scratch to solve your basic industrial apparel problems under chemical conditions.

We had these questions to answer: What clothes would work best, wear best, feel best under your job conditions? Could such clothes be made to cost you less than any industrial garments on the market today?

The answer was so fanfastic that we tested it under every available lob condition before we would believe it ourselves.

Here it is:

Acid and Chemical Resistant

Industrial Garments made of

# ORLON

New wonder fabric of DuPont Acrylic Fiber by Travis outlast cotton and wool garments 13 to 1

FOCTS: Tested under specific chemical conditions, a cotton trauser costing \$2.50 lasted 10 daysyour cost 25c per day. A comparable wool garment costing \$7.00 lasted 15 days—your cost 47c per day. A comparable Worklon garment of Orlon costing \$8.25 lasted over one. year-your cost less than 2c per day!

facts: Worklon industrial garments of Orlon are tailored in every type for every job, for men and women. All are lightweight, better looking, launder easily, dry quickly, need no ironing, keep trouser creases through weeks of washing.
All are chemical and acid resistant.

253 West 28th St., New York 1, N.Y.

this catalog will cut your costs! send for it today!

This coupon (or your letterhead) brings you the complete Worklon catalog, just off the press.

Worklon, Inc. 253 West 28th St., New York 1, N.Y.

Please send me FREE OF CHARGE year catalog of Indiarrel made of Orion . . . a DuPont Acrylic Fiber.

# GIVIL DEFENSE INSTRUMENTS AVAILABLE NOW



The SU-10 RADIAC is an ionization chamber type survey meter with five differently colored scale ranges of 5, 50, 500, 5,000, and 50,000 mr/hr. It is built to Armed Forces specifications and has been approved by the Federal Civilian Defense Agency. The instrument is shock and immersion proof and is provided with a built-in radioactive checking source.



The SU-6 POCKET RADIAC is an ionization chamber type instrument which has a single logarithmic scale with a range of 25 r/hr. It can be operated with one hand and fits easily into hand or pocket. Hearing aid components are used throughout this survey meter.

Write for Bulletin E-32.





# **Green Cross News**

Activities of Local Safety Councils and Chapters

Compiled by TOM A. BURKE

Director of Local Safuty Programs, Field Organization, NSC

### Pittsburgh Publicity

In connection with the interleague baseball contest between the Boston Red Sox and the Pittsburgh Pirates, played at Forbes Field in Pittsburgh on August 20, the Pittsburgh Sun-Telegraph. joint sponsor with the Western Pennsylvania Safety Council, ran a full page of splendid publicity pictures. The photographs indicated the child safety activities, such as the safety courts, the annual picnic for school patrols, "Safety-town" and the council's participation in the Green Pennant program. Topping the page were large action photographs of Ted Williams and Ralph Kiner, two of baseball's leading home-run hitters.

Nearly 12,000 persons witnessed the game which was won by Pittsburgh, 3 to 2. The page display was wonderful publicity for the safety council as well as for the ball game.

Incidentally on the same day the editorial page of the Sun-Telegraph featured a letter from Manager Harry Brainerd of the safety council urging the newspaper to expose the selling of the "atom" toy pistols as unsafe products. As a result of this letter a feature article provided the necessary urge to get quick action by the Police Department in banishing the sale of the so-called toy.

### Noble Dutton Joins NSC Staff

NOBLE DUTTON, for the past five years director of the Portland (Ore.) Traffic and Transportation Commission, has joined the NSC staff as assistant department manager, Field Organization. He assumed his new duties on August 15.

Dutton has had wide experience

in safety administration, particularly in the field of traffic safety. He is a graduate of the University of Oregon and the Oregon College of Education and holds certificates from Oregon State College, for short courses in driver training and education, motor vehicle fleet safety supervision, industrial safety engineering and teacher training and vocational education.

He has planned and directed safety courses for many interested groups in the Portland area and the Portland Pedestrian Violators School, which he directed, has attracted national attention. He is an experienced writer and publicist and had practical educational experience as a school principal before taking up accident prevention work as a career.

During 1944 and 1945 he directed industrial checks as senior inspector in war industries in the Portland area and is familiar with all phases of industrial safety.

During his work with the Portland Commission he has gained public support for many of the Commission's policies and projects through his fine sense of public



Noble Dutton

# GOGGLE VALVES



# Open & Close Instantly

WHETHER OPERATION
IS FREQUENT
OR OCCASIONAL

### THERMAL EXPANSION TYPE

Steam passing torough steel tubes causes linear expansion sufficient to free the goggle plate. When the steam is removed, normal cooling contracts the tubes, clamping the goggle plate with a gastight seal. In case of steam failure this type Bailey Valve can be operated mechanically.

### MECHANICAL TYPE

A powerful, hand-operated clamping device assures a positive, gas-tight seal around the entire periphery of the valve. The goggle plate is released and clamped by the same powerful mechanism.



THERMAL
Mode in diameters of
36" to 120"



MECHANICAL 60" x 48" Bailey Valve for Horizontal Gas Main. Sizes 6"

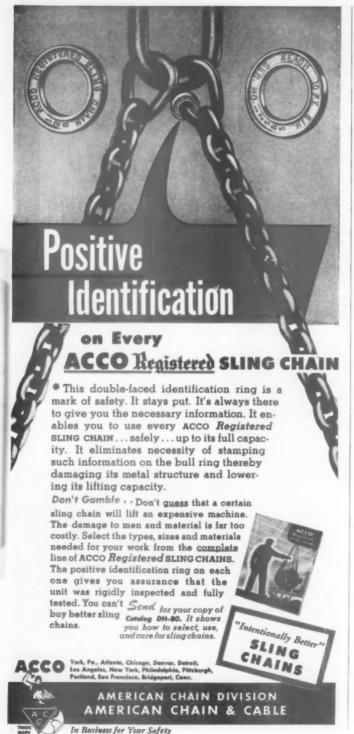


For use near open flame a totally enclosed type is furnished

ENCLOSED

Here is the means to instant service in shutting off gas mains in emergencies or for repairs . . regardless of the length of time the valves stand gaussed. Soundly designed and built of the highest quality materials, Bailey Goggle Valves have repeatedly proved themselves dependable on gas washers, blast furnace mains, precipitators and boiler plants. With their positive, gas-tight seals, Bailey valves protest men and equipment, and assure economy, through long, maintenance-free service.





relations and ability to diagnose traffic weaknesses and prescribe for their correction.

Dutton is a native of Portland. married and has two children. His family has moved to Chicago.

### Ladies' Safety Councils

In a praiseworthy effort to promote community safety, wives, mothers and daughters of Missouri-Kansas-Texas lines in various cities along the right-of-way have been organizing "Ladies' Safety Councils." Nine or ten organizations have been set up during the past few months. The council ladies hold monthly meetings and this summer they have been conducting their business sessions in connection with picnics, watermelon parties, etc. B. A. McDonald, superintendent of rules and safety for M-K-T has been assisting in setting up the councils and the NSC Field Organization has provided appropriate educational program suggestions. Each council adopts its own by-laws and sets up its own activities program. This is an interesting development that eventually might be adopted by other railroads.

### Los Angeles Report

In a foreword to the 1950-51 annual report of the Greater Los Angeles Chapter, NSC, L. W. Van Aken, president of the chapter. made this significant statement: "Accidents and their attendant loss in personal tragedy and economic drain, are one of the greatest corrosive forces extant in this nation and community today. The staggering total in terms of productive lives and dollars lost by criminal carelessness is a national disgrace. ... The positive side of this grim picture is represented by those organizations and individuals, who, recognizing the vital implications of this problem, and believing it to be a community responsibility, have joined hands in a determined and continuous effort to overcome it. Their sole objective is the reduction of accidents and the saving of lives, and they seek this goal through education." The work of the various divisions is set forth in the unusually attractive booklet

and particular emphasis is given

to the industrial and commercial vehicle activities of the chapter.

### Birthday "Cake"

The fifth anniversary of the Oklahoma City Safety Council was observed on August 11 and as a remembrance Manager Dan Hollingsworth sent out two-color birthday cards with a drawing of a five candle cake as the centerpiece. The folder pointed out that in the five years since the council was organized, Oklahoma had received ten national awards including two grand awards in the traffic contest for first place among cities of all population groups, plus national recognition for other safety activities. Incidentally, on August 5 Oklahoma City completed ten years without a single bicycle death, a remarkable record for a city with 16,000 registered bicycles.

### **Management Changes**

The NSC Western Regional office reports that George F. Stoeberl is the new manager of the Maricopa County Chapter (Phoenix, Ariz.) succeeding Herbert Hodgson. Stoeberl, a graduate of the University of Wisconsin, is a war veteran and has wide experience in public relations, advertising and journalism. Keven R. Twohy, formerly legal advisor for the San Jose branch of the California State Automobile Association and a graduate of Santa Clara University, is the new manager of the Santa Clara County Chapter. He succeeds William J. Moore. Harold G. Stanley has been appointed managing director of the Pasadena District Chapter. He was a naval lieutenant in World War II and holds a B.A. degree in business and public administration. He recently completed a one-year internship in municipal management, a program conducted by the city.

#### Louisiana's Expanded Program

The Louisiana Safety Association is planning an expanded program of activities for 1952 and has recently published an enlightening booklet on the State's accident experience, "Saving Millions Through Safety." An interesting comparison shows that the annual cost of accidents in the state, \$76,000,000, is almost as great as the total operating expense of state government by functions for one year. In the proposed expanded program there will be 11 safety





U-5:5 MULTIGRIP FLOOR PLATE is comfortable to walk on, comfortable to work on. And, wet or dry, Multigrip offers skid resistance and positive traction in every direction . . cuts down on accidents due to slips and falls. The sloping sides of the scientifically-designed risers make it impossible to trip on them. Multigrip is attractive in appearance. Easy to clean. Permanent. Safe.

Install U.S.S Multigrip wherever sure footing is essential. On ship decks and walkways. On machinery steps and platforms. Or to cover entire factory floors.

Get further information about Multigrip from your nearest steel warehouse or write to us direct.

United States Steel Company, Pittsburgh • Calumbia Steel Company, San Francisca
Tennessee Coal, Iron & Railroad Company, Birmingham • United States Steel Expert Company, How York
United States Steel Supply Company, Warehouse Distributors, Coast-to-Coast



U.S.S MULTIGRIP FLOOR PLATE

UNITED STATES STEEL

activity divisions as follows: public information, traffic, home, child and school, industrial, commercial vehicle, farm, general public, fire safety, women's activities and statistical-research.

### Small Plant Problem

Local councils and chapters were alerted recently concerning the small plant problem and the managers have been invited to cooperate in the nation-wide small plant program recently undertaken by NSC. The informational pamphlet, "Safety Pays the Smaller Business," has been sent to the chartered councils with a letter stating, "you will find this information interesting and helpful and you may discover some new approach to your problem, which we all know is a 'toughie.'"

### **Grand Rapids Assistant**

Robert Richards, formerly safety engineer for the American Musical Instrument Company at Grand Rapids, has been appointed assistant to the manager of the Safety Council in that city and will be Manager Ross Farra's first lieutenant in directing the Council's activities. Richards has had wide experience in production control, personnel and safety work.

### Down-to-Earth Facts

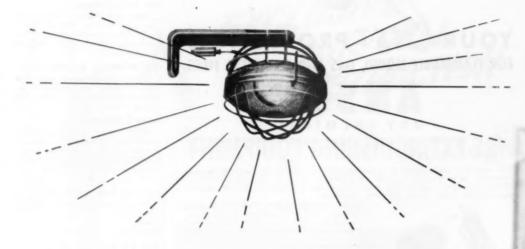
The Hampden County Accident Prevention Council has recently published and distributed a clearcut description of the Council's activities and accomplishments in a 12-page planograph job, well illustrated with photos showing many Council groups in action.

### Frequency Rate Reduced 82 Per Cent

Bethlehem Steel Company has reduced accident frequency in its operations by 82 per cent as the result of a thoroughly engineered safety program of 35 years standing, according to A. B. Homer, president of the company.

The reduction is based on a comparison of figures for the periods, 1916 to 1920 and 1946 to 1950. The figures include the ecords of steel plants, shipyards, mines, and other units.

Organized safety procedures, with people specifically assigned to the work on a full time basis, were introduced in 1916.



### THE FIRE WATCH THAT NEVER SLEEPS

ARE you ready for fire when it strikes? Week ends? Nights? During shut downs? Put a Kidde Automatic Fire Extinguisher System on the job—it's always on the alert against fire.

The heat from a fire hits the Kidde detector...sends a signal that releases flame-smothering carbon dioxide automatically. Such a system can protect a single space...or many spaces throughout the plant.

Wherever a hazard exists—in engine rooms, fuel storage rooms, document vaults, electrical equipment—you can depend on fire-sensitive, fast-acting Kidde automatic or manual systems to protect your property. Call on us for full information.



Walter Kidde & Company, Inc., 1045 Main Street, Belleville 9, N. J. Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.



### EST PROTECTION FOR FLAMMABLE LIQUID, GAS AND ELECTRICAL FIRES

You, who have seen or used an Ansul Dry Chemical Extinguisher at a fire demonstration or on an actual fire, quickly recognized its superior fire-fighting capabilities. Further investigation proves that Ansul "Water-tight Construction" provides greater dependability under severe exposure conditions.



Ansul Hand Portable Mod--- 4. 4-B. 20-B and 30-B

Fire Chiefs, insurance inspectors, safety engineers, etc. recognize Ansul as the leader in the dry chemical extinguisher field. Ansul Fire Extinguishing Equipment and "PLUS-FIFTY" Dry Chemical have set unparalleled standards of quality for the fire extinguisher industry.

You get complete dry chemical fire protection only from Ansul. There is an Ansul Dry Chemical Fire Extinguisher of the proper size for almost every flammable liquid, gas and electrical fire hazard. Safeguard your plant and irreplaceable equipment with the BEST fire extinguishing equipment available. Protect them with ANSUL EXTINGUISHERS.

### ANSUL EXCLUSIVE FEATURES

- Patented Nozzle assures most effective stream pat-tera . . Best results by inexperienced operators.
- Special packings in Noz-zle and other parts ex-clude water.
- Corrosion resistant con-struction throughout.
- Easy on-the-spot Recharging (No tools needed) Quick, positive puncture
- Special guard protects cartridge . . . rugged construction throughout.
- Ansul "PLUS-FIFTY"® Dry Chemical used exclusively.
- Field tested by thousands of satisfied customers.
- Ansul LT Models are the only dry chemical ex-tinguishers listed by U.L. for operation at -65° F.









asul Wheeled Portable

- 150-A and

Models

350-A.





Fire Extinguisher Division MARINETTE . WISCONSIN

DISTRIBUTORS IN ALL PRINCIPAL CITIES IN THE U. S. A., CANADA AND OTHER COUNTRIES

## COMING **EVENTS**

In the Field of Safety

Oct. 8-12, Chicago

Thirty-ninth National Safety Congress and Exposition. (Stevens Hotel). R. L. Forney, general secretary, National Safety Council, 425 N. Michigan Ave., Chicago 11.

### Oct. 29-Nov. 2, San Francisco

American Public Health Assn., 79th Annual Meeting. Dr. Reginald M. Atwater, executive secretary, APHA, 1790 Broadway, New York.

### Nov. 2, Cincinnati

First Annual Greater Cincinnati Safety Conference. (Netherland Plaza Hotel). Kenneth R. Miller, coordinator, Greater Cincinnati Safety Council, 1203 Federal Reserve Bank Bldg., 4th & Race Sts., Cincinnati.

### Nov. 16, Fort Worth, Tex.

Seventh Annual Industrial Institute. (Hotel Texas). L. W. Graff, safety director, Fort Worth Safety Council, Majestic Bldg., Fort Worth 2, Tex.

#### Dec. 3-4, Baton Rouge, La.

Louisiana Safety Association, Annual Conference. (Louisiana State University). Charles E. Doerler, secretary. P. O. Box 806, Shreveport, La.

### Jan. 21-24, Houston, Tex.

American Roadbuilders Association, Annual Meeting. Eugene Reybold, ex-ecutive vice-president, International Building, Washington 4, D. C.

### Apr. 1-4, New York

Twenty-second Annual Convention, Greater New York Safety Council. (Hotel Statler). Paul F. Stricker, executive vice-president, 60 E. 42nd St., New York 17, N. Y.

#### May 8-9, Baltimore, Md.

Statewide Safety-Health Conference and Exhibit. (Lord Baltimore Hotel). Joseph A. Haller, director of safety, State Industrial Accident Commission, Equitable Bldg., Baltimore 2, Md.

### **Leads Ford Plants** In Safe Man-Hours

A company-wide record of 4,-635,135 man-hours without a disabling injury has been made by Ford Motor Company's assembly plant at Chester, Pa. This sets a new high for Ford Assembly plants.

The previous record of 4,626,-093 man-hours was held by the Somerville. Mass., assembly plant.



EXCLUSIVE AIR-CELL CONSTRUCTION

LIGHTWEIGHT FLEXIBILITY!



LONG WEARING!



WATERPROOF



HEAT AND COLD INSULATION!

### FATIGUE-LESS COMFORT!

Bag. U. S. Pat. C

If these 6 accident prevention features are important to you, then always specify famous Vul-Cork or . . .



Vul-Cork Oil Resisting Neoprene Soles—the only soles made with exclusive AR-CELL CONSTRUCTION. Vul-Cork
OIL RESISTING

Vul-Cork oil-resisting Neoprene combines VUL-CORK'S famous confort features with complete protection against excessive oils, acids, caustics, and hot surfaces underfoot. With Neoprene, lightweight VUL-CORK Soles remain flexible, do not crack in extreme cold, do not revert — or melt — on hot surfaces. The ideal all-purpose sole.

Free descriptive literature sent on request

Vul-Cork SOLES WITH EXCLUSIVE

AIR-CELL CONSTRUCTION, patented

and made exclusively by

THE Cambridge RUBBER COMPANY VUL-CORK SOLE DIVISION

# **MAKE SAFETY SIMPLE**

Every Safety and Production supervisor wants workmen to keep goggles and glasses clean. Foul sight is a terrific hazard. It kills accuracy, efficiency and safe production. Yet lenses stay dirty and dangerous unless you make it easy as possible to keep them crystal clear. The trick is to make it simple.

MAGIC LENS TISSUE does this vital job the handiest way; quick, and in one operation. Does it easy... better, faster, brighter, more lasting. It polishes as it cleans. And it protects lenses like magic.



# GO MODERN-GO MAGIC!

The results can pay for themselves a thousand times over; on assembly lines, in workshops, mines, foundries, process and machine operations of every sort, refineries, mills where dust or lint accumulates, welding or riveting areas where sparks fly, offices, engineering departments or laboratories where lens accuracy is indispensable.

If you supply a rag, or ordinary fiber paper, lint and smears stick to the lens. If you ask your folks to fuss with a cleansing fluid, time is wasted by this old-fashioned method, except in grimiest operations. If you supply a small treated sheet, it tears and one sheet doesn't do the job.

You need a big sheet. And that's what you get. Each sheet is over 50% larger than usual . . . yet it costs less. The answer is in the volume from satisfied users. So you get a lot more safety for a lot less money. Compare these prices and advantages and decide:

# NO COMPLICATED DISPENSER—NO CUMBERSOME CABINET NO BOTHER—NO WASTE—NO FLUID

MAGIC LENS TISSUE reaches you interfolded from our special interfolding machines. The simple, compact dispenser, NOT MUCH BIGGER THAN A MAN'S FISTS, contains no moving parts. Place it anywhere; elbow-close to the job. Just unlock it. Insert Refill Cartridge. It dispenses each sheet one-by-one without waste . . . at a great saving. And as easy as lifting a finger.

The paper is, without question, the finest that can be made; treated with General Electric silicone from the G-E House of Magic. Each carton contains 6 Refill packets (800 jumbo-sized 5" x 63/4" super-strong sheets per packet) at only \$8.40 per carton. And the dispensers cost only \$2.50. All prices FOB our factories, Wire or write us, or order through your safety supply jobber now.



The Silicone Paper Company of America, Inc.

### Safety Manual

-From page 97

powerful reasons. In the first place, there are many people in your organization with specialized knowledge of great value on various subjects which will be carried in the manual. Much of this knowledge has not been committed to paper, or, if so committed, is in the form of memoranda and other notes not available to the ordinary researcher.

Second, and perhaps more important, you are going to face at a later stage in the preparation of the manual the necessity of clearing it with many people. It is only common sense to involve some of these people in the project early and make them feel that they have a real share and voice in it. No better tactic has ever been devised for the prevention of opposition.

### Writing the Copy

Safety rule books are excellent examples of the saying, "It isn't what you say that hurts; it's the way you say it." Essentially, safety manuals tell employees what they should and should not do. Modern manuals show a trend away from the "regimentation" style of preaching "do" and "don't" and "must" and "must not." Most employees resent this type of approach; if it is used, they may develop a subconscious antagonism toward rules.

However, there are some situations in safety where the absolute prohibitive must be used even at the risk of offending the reader or listener. For instance, "Travel at Your Own Risk," indicates that you can proceed if you are willing to take the risk which has been brought to your attention. In the case of a gasoline storage area, a must instruction, such as "Gasoline—Smoking Positively Forbidden," means just that. Use the must style like a whip-sparingly, and only when absolutely necessarv. Put some faith in the intelligence of the reader to understand what is meant.

Present thinking is to use a positive and constructive approach. Here are some hints to follow.



For greater safety under foot, in your plant and on your products

# Inland 4-Way Safety Plate



Light | Strong!



**Quick Cleaning** 



INLAND STEEL COMPANY, Dept. NSN-18 38 Se. Dearbern St., Chicago S, Ill. Sales Offices: Chicago, Devenport, Detroit, Indianapolis, Kansas City, Milwaukee, New



**Lasts Long** 



Stays Flat

New Bulletin with New Ideas — Just Out! Bulletin F1. Complete engineering and application data.
Send for it!

STOCKED BY LEADING STEEL WAREHOUSES



Yours for little extra cost with

LAUGHLIN Safety Hooks



"The Latch Locks the Load"

Laughlin Safety Hooks, costing little more than ordinary hoist hooks, pay for themselves many times over by preventing accidents. That sturdy safety latch guards against dangerous failure—mechanical or human—in a number of important ways. For example:

- 1. It prevents load from slipping or jarring loase in mid-air.
- It eliminates the hazard of carelessness
   the load that was supposed to be lasted but wasn't.
- 3. It prevents overcrowding the hook.
- 4. It warns of hook failure, because latch will open if hook starts to spread.

### **Rig Safety into YOUR Hoists**

by changing over to Laughlin Safety Hooks. Made of drop-forged, heat-treated steel, they have pressed steel latches in the smaller sizes, cast bronze latches in the larger sizes, all with stainless steel springs. Available in various types for 750 lb, to 15 ton safe working loads at your mine, mill or oil field supply house.

Freel Catalog-Data Book tells you how to select the right wire rope and chain fitting for every job. Complete specifications helpful tables. Use the coupon below.



THE THOMAS LAUGHLIN COMPANY
310 Fore Street, Portland 6, Maine
Please send Catalog-Data Book 2150 to:
Name.

Company
Street
City.
Zone State.

THE MOST COMPLETE LINE OF DROP-FORGED WIRE ROPE AND CHAIN FITTINGS

- 1. State rules as information or advice.
- 2. Tell what should be done rather than what should not be done.
- 3. Explain the why's and wherefore's.
- Be informal in your approach.
   Avoid putting the employee in a bad light.
- 6. Avoid preaching,
- 7. Avoid using the words, "must" and "don't."

One thing to bear in mind when writing is that you are writing for someone else to read and understand. It is erroneous to assume that others will understand what you write just because you understand it.

Some writing fails because it uses a vocabulary beyond the understanding of the audience for whom it is intended. Some fails because it employs awkward, complicated sentence structures. Some fails simply because the writer is inept at the trade of word carpentry.

So, unless you are a well-trained writer, try what you are writing out on people who are typical of the audience you are trying to reach. And don't wait till you have written 20,000 words of what seem to you beautiful prose. Try out your first chapter or two, and be sure you pick a critic who isn't averse to telling you if you are wrong. A technically perfect grammatical gem will impress colleagues and supervisors; but if it doesn't get the message across to the employees who read it, it will be a flop as far as accident prevention is concerned.

There are no sure fire tests for the readability of copy except this crude trial and error method. However, Dr. Rudolph Flesch of Columbia University gives us in his books, The Art of Plain Talk and The Art of Readable Writing. some rough, rule-of-thumb measures that have some usefulness. He has set up a formula for classifying written material into several levels of readability, ranging from "very easy" (level of the comics) to "very difficult" (level of scientific journals.) The basis for the formula is:

 The lower the average number of words per sentence and the shorter the words, based on average number of syllables per 100 words, the easier your writing will be read and understood. Vary

# SCHEDULE SATISFACTION?

you'll find it's easier with . . .

## H00D+

Gloves!



Model 4710 - Neoprene palm

coated glove for general utility use...providing

work gloves.

7-8 times the wear of

standard canvas

Maintaining shipping schedules is always a problem for industry, both in the shipping itself, as well as in production delays that affect shipping. To help lick this ever-present problem see that your employees wear Hood Industrial Work Gloves! Then you can rest assured of more production through more protection for vital hands.

And remember, every Hood glove is performance-proven by actual "on the job" testing in every type of industry.

Two styles of these more economical gloves are shown here ... just two of a complete range of gloves for more protection. longer wear, in all industries!

"Put your employee's hands into a safer glove"

Write today for the colorful new catalog showing the entire Hood line.



-HOOD for NEW Safety

**HOOD RUBBER CO.** Watertown, Mass.

## The Sure Way to Safety "A" STANDARD and SAFETY SIGNS

Won't Blow Over **Folds and Locks** in Place Eastern"A"Standard has red angle iron frame and yellow free-swinging sign with blacklettering on both sides; choice

Pat. Pending

Put safety to work for you with Eastern Metal signs . . constantly on guard against accidents.

All Eastern Metal signs are official designs as specified by the American Standards Association, with new, legible lettering, brilliant colored backgrounds, heavy-gauge steel, and durable flexible baked ename! resistant to weather and stone bruises.

KEEP

WEAR YOUR GOGGLES

Eastern Metal Signs promote safety and help prevent accidents. Economically priced, prompt delivery. Illustrated folder and price list sent on request.

of eight standard signs. Also reflectoriz-

ed for extra safety at night.



EASTERN METAL of Elmira, Inc. Elmira Heights 8 N.Y.

carrying and easy storage.

trucks.

New Type Eastern "A" Standard

. . enthusiastically accepted by city and

county highway departments for most ef-

fective warning of motorists approaching a

work area. Durable angle iron frame opens into a wide base that won't be knocked over by strong winds or gusts from passing

Unit stands 27-in. high, is 181/2-in. wide, and sign is 18-in x 18-in. Weighs only 13 Flags are removable and unit folds

neatly, locking sign in place for convenient



### You can easily find out with this portable laboratory!

Seeing is believing! See how your present floor absorbent compares with any other! Ask any Eagle-Picher representative to show you an impartial laboratory test—right in your plant—to prove that remarkable Eagle-Picher Floor Dry is not only more efficient, but more economical. See for yourself that it actually gives more coverage, more absorption per dollar.

Chemically inert, and non-combustible, Eagle-Picher Floor Dry is insoluble. Its light weight provides highest possible coverage, and its light color has unusual reflective properties which brighten working areas and add to plant safety.



General Offices: Cincinnati (1), Ohio

your sentence length; and avoid words with affixes, prefixes, and suffixes.

The more personal references you use, the more you will hold your readers' interest. Personal references include pronouns, names, and words that refer to people.

It is obvious that a piece of writing may use only simple words and short sentences and be well studded with personal references and still be gibberish. So, by all means, take Dr. Flesch's formula as a legitimate danger signal if it points up the difficulty of your copy. But don't assume that a good score on that formula is proof that your material is well-written for your audience.

#### Teamwork

A safety manual written by one person is likely to be incomplete and reflect limited experience and judgement. The material should combine the experiences of many individuals. It is a basic principle of good industrial relations to see that employees have a voice in the determination of conditions under which they work. There is less chance for misunderstanding and rules are more likely to be obeyed if they are the result of a joint effort by all concerned.

One of the best ways to prepare the contents of a safety manual is to have the job done by committee action of management and employee representatives. In this way many difficulties can be prevented. Agreement by all principal parties before a manual is published is a good example of common sense in action. It is much easier and wiser to make necessary changes before publication than afterwards.

### N.Y. Conference April 1-4

April 1-4, 1952, have been announced by the Greater New York Safety Council as the dates for the Twenty-second Annual Safety Convention. Harold K. Kramer, Council President, announced the appointment of Walter A. Gustafson, chief engineer for the Lumber Mutual Casualty Insurance Company, as general chairman of the convention.



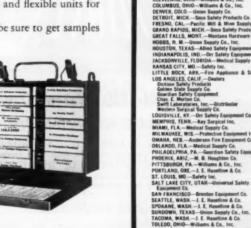
# A flower for your buttonhole...every day!

visit Booth 137 at the Safety Convention to get your fresh "mum" daily and meet your (MCO distributor

See the newest in first aid kits and flexible units for the field operations of industry. And be sure to get samples

and the whole story on Medical Supply Company's revolutionary new elastic adhesive compress with live natural rubber elasticity.





Medical Supply Company . ROCKFORD, ILLINOIS



PLACE IT . . . USE IT Right away for . . . PATCHING -- REPAIRING or COVERING concrete-wood, metal or asphalt.

INSIDE OR OUTSIDE-NO MIXING, NO CUTTING-NO DELAY FOR LIGHT or HEAVY DUTY!

Spreads thin at edges - TOUGH, will not break or crack - DURABLE -PERMANENT!

#### SAFE! NO SKIDDING or SLIPPING

Resurfaces worn, damaged or broken floors, aisles, platforms, ramps, stairways, driveways without delays or downtime.

SEND FOR NEW FOLDER ASK ABOUT LOW COST PER SQUARE FOOT



### Also NON-SKID Wet or Dry. READY MIXED FOR INSTANT USE



KEEP 'em rolling on LOW TRACTION FLINTZthe thin section surfacer that provides long lasting smooth floors. NO BREAKING OF THIN EDGESI Hand operated or Gas propelled trucks continue to roll-after pulling has stopped. NO DELAYS.

# LOW COST RESURFACER!



Like moist sand-FLINTZ spreads thinner, goes farther and costs less per square foot. Provides years of hard usage and Low Traction service.

ALL DURA TRED PRODUCTS ARE GUARANTEED Write for complete information.

dura-fred (o.

Manufacturers since 1938 361 N. Contral Park Blvd., Chicago 24, Ill.

#### "Best Way" Brings 23 Safe Years

SINCE JUNE 16, 1928, no disabling injury has occurred in the Electrical Department of the Parlin, N. J., plant of The Hercules Powder Company. This group is entrusted with operation and maintenance of electrical equipment for a large chemical plant. On August 1, 1951, the exposure reached 776,-719 man-hours.

The electrical department represents a total of 403 years of safe and satisfactory service. Safety Supervisor D. K. Warden of the Parlin plant gives much of the credit to the men who have directed the department for many years. They have instilled into the men of their department that the "one best way" is the safe way.

Ready for use

when laid

DURA-TRED CO.

Some of the supervisory records are exceptional. Eric Jensen, electrical supervisor, who is credited with being the mastermind in the program, has been 36 years with the company. Charles Benze, general foreman, has a service record of 25 years. Bill Tibbitt, assistant electrical supervisor, has nine vears service, and two foremen, Chris Grimley and Doug Miller, the "quarterbacks of the team," 22 years each.

#### Great White Fleet

-From page 109

stagnant water and other mosquito control measures are certain cure for "fever"; that prompt and efficient medication from field dispensers who are always available, will prevent a trip to the hospital; that modern sanitation methods such as sewerage systems, mean less time lost from the job. A halfcentury ago, these ideas were novel; today they are accepted doctrine.

Tropical disease prevention hasn't been the only concern of the United Fruit, however, in its endeavors to protect the lives and health of employees. Primarily agricultural, the company's experience has corroborated findings of T. C. Robinson in his publication Gathering and Evaluating Accident Data with Respect to Farm People and Farm Workers and J. H. Powers in The Hazards of Farming.

In Almirante, Panama, for example, where the company's medical superintendent, Dr. Gustav Engler, has adopted the National Safety Council's method of evaluation of the frequency and severity of working accidents, agricultural accidents have been found to be more numerous than those suffered in other departments; of these, machete injuries and accidents by mules were the most common.

Special efforts are taken to identify accident-prone individuals and see that they are separated from exposure. In this United Fruit division, the use of protective gloves and goggles, and broadening of medical service has resulted in a sharp drop in the frequency rate per million man hours to 213.9 compared to the 1949 figure of 277. The severity rate per 1000 man hours for both years was 1.4, compared to the National Safety Council's figure of 1.02 for all U. S. industries reporting in 1950.

Other types of accidents have been kept relatively low as agriculture in the tropics has become more mechanized. The company schools employees, not only in operating technique but safety practices as well, when each new piece of machinery is introduced. Moreover, as each employee is introduced to the machinery he is indoctrinated in practices which are designed to make full use of the equipment and at the same time protect him from injury. Not relying on these measures alone, all company supervisory personnel are charged with the responsibility of implementing the safety program and using whatever means necessary for corrective action.

Prompt and effective first aid and removal to suitable facilities for care and treatment have done much to keep the severity rate low. First priority on the company's communication and transportation network goes to accident cases. In many cases, airplanes are used to move serious accident cases.

The machete, however, remains the No. 1 hazard. The universal and ever-present tool of the Middle American worker, the machete is so designed that when comparatively new, the user can swing it with a loose wrist, exerting con—To page 154

# ANNOUNCING...



BUFFALO FIRE APPLIANCE CORPORATION

DAYTON 1, OHIO



STOP injuries, costly claims, lost production time!

"Safety-Walk" pays for itself a hundred times over on catwalks, steps, ramps and walkways. This mineral-coated fabric provides perfect traction, . even under water, oil or grease! Pressure-sensitive adhesive sticks on any clean surface. Available in 4 colors, many sizes and shapes.

#### FREE SAMPLE

Try "Safety-Walk" yourself! Easy to apply ... strip off liner and press in place. For free sample and complete information write: Minnesota Mining & Manufacturing Company, Dept. NSN-101, St. Paul 6, Minnesota



Made in U.S.A. by MINNESOTA MINING & MFG. CO., Rt. Paul 6. Minn., also makers of "Secteti" Brand Pressure-sensitive Tapes, "Secteti," Sound Recording Tape, "Underseal" Rubberjaed Coating, "Sectehitte" Reflective Sheeting, "3M" Abrasives, "3M" Abrasives, General Export: Minm. Mining & Mfg. Co., International Division, 270 Fark Avenue, Mfg. Co., International Division, 270 Fark Avenue, Mininge & Mfg. Co., Left, London, Canadam Minnesota Mininge & Mfg. Co., Left, London, Canadam Minnesota Mininge & Mg. Co., Left, London, Canadam Minnesota Mininge & Mg. Co., Left, London, Canadam Minnesota Mg.

# The Safety Library

Books, Pamphlets and Periodicals of Interest to Safety Men

#### **BOOKS AND PAMPHLETS**

#### Manual of Ventilation

Industrial Ventilation. A Manual of Recommended Practice. Published by American Conference of Governmental Industrial Hygienists, 1951. 162 p. Available from Committee on Industrial Ventilation, P. O. Box 453, Lansing 2, Mich. Price \$3.00.

The manual was prepared by a committee of the American Conference of Governmental Industrial Hygienists. The purpose of the authors is to provide a ready single source of the most recent data on industrial exhaust ventilation to meet the needs of official industrial hygiene agencies and to assist in standardizing ventilation practices.

The manual is an excellent source of information for safety engineers, plant engineers, ventilation contractors, and others interested in the principles and practices of controlling atmospheric contaminants and the comfort of workers.

The general principles of ventilation are concisely explained with simple illustrations in the first section. A bibliography provides sources of supplementary information to give the reader further details.

Hood design has special importance in ventilation and considerable space is given to the subject. A particular feature of this section is a table which gives the capture velocities for specific operations. Examples of the basic calculations are given and sketches are used extensively to visualize the application of fundamental principles in hood design.

A particularly valuable feature is numerous sketches in the design of hoods for many different types of operations, such as grinders, bins and hoppers, tanks, and welding.

Two methods of making the calculations in designing ducts are discussed in detail with appropriate examples. Sketches to illustrate principles of design are numerous and particularly point out features in good and poorly designed elbows and branch entries.

This section also contains charts and tables giving essential information in design procedure, such as the friction chart for round ducts and a table giving the velocities

Ventilation systems should be checked periodically so that the section on testing of ventilating systems is of special interest to many safety engineers. Particularly useful are the descriptions of various instruments and their limitations.

Data on the selection of proper fans and on air cleaning devices round out the completeness of information on designing ventilation systems. The publication is recommended to all safety and health departments.

#### Aeronautics

Comparative Safety Statistics in Operation of U. S. Scheduled Airlines Calendar Years 1938-1950. Published by Civil Aeronautics Board, Washington 25, D.C. 1951. 13 p. Free.

Mountain Winds and Their Effect on Flight. By George M. French. Published by Civil Aeronauties Board. 1951. 14 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 10c.

#### Chemicals

Ethylene Oxide. Published by Manufacturing Chemists' Association, 246 Woodward Bldg., Washington 5, D.C. 1951. 18 p. Price 30c. (Chemical Safety Data Sheet SD-38.)

Hydrochloric Acid, Aqueous Hydrogen Chloride, Anhydrous. Published by Manufacturing Chemists' Association, 246 Wood-

# Kegistered wire rope slings

WITH DUALOC

- Made from <u>preformed</u>
  improved plow steel wire rope
  with independent wire rope core.
- Develops full catalog strength of rope. Ending is locked for full life of the wire rope.

- Flexibility of DUALOC permits close, secure snubbing.
- Wire ends are completely enclosed.
   Can't snag nands or clothing.

# TRY JUST ONE

- We're so sure you will like ACCO Registered WIRE ROPE SLINGS that we ask you to try just one. Put it in service with a sling you now use. Compare it in every way. You'll find it is stronger, lighter in weight, easier to handle, safer to use—and—cheaper in the long run.
- Proof-tested, registered, and warranted to satisfy. You can't lose
  if you use ACCO Registered STRAND-LAID and CABLE-LAID WIRE ROPE SLINGS.
   See your local distributor today or write us for further information.

\*Trade Mark Registered

MEMBER THE NATIONAL SAFETY COUNCIL





Wilkes-Barre, Pa., Chicago, Denver, Houston, Les Angeles, New York, Philadelphia, Pittsburgh, San Francisco, Bridgeport, Conn.

AMERICAN CHAIN & CABLE
WIRE ROPE SLING DEPARTMENT

In Business for Your Safety





ward Bldg., Washington 5, D.C. 1951. 27 p. Price 35c. (Chemical Safety Data Sheet SD-39.)

Methyl Chloride. Published by Manufacturing Chemists' Association, 246 Woodward Bldg., Washington 5, D.C. 1951, 17 p. Price 30c.

#### Civil Defense

Principles of Civil Defense Operations. Published by Federal Civil Defense Administration. 1951. 45 p. For sale by the Superintendent of Documents, Washington 25, D. C. Price 20c.

Sabotage and Plant Protection. Published by U. S. Chamber of Commerce, Washington, D.C. 1951. 25 p. Free.

This is Civil Defense. Published by Federal Civil Defense Administration. 1951. 31 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 10c. (Publication PA-3.)

The Warden Service. Published by Federal Civil Defense Administration. 1951. 44 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 20c.

Water Supplies for Wartime Fire Fighting. Published by Federal Civil Defense Administration. 1951. 14 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 10c.

#### Construction Industry

Sajety Requirements. Published by Department of the Army, Corps of Engineers. 1951. 114 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 30c,

#### Duck

Size of Smallest Particles Determined in Impinger Dust-Counting Methods. Published by U. S. Bureau of Mines. 1951. 19 p. Available from the Bureau, Publications Distribution Section, 4800 Forbes St., Pittsburgh 13, Pa. Free. (Report of Investigation 4802.)

#### Gases

Explosibility of Mixtures of Propane, Air and Carbon Dioxide and of Propane, Air and Nitrogen at Elevated Pressures. Published by U. S. Bureau of Mines. 1951. 9 p. Available from the Bureau, Publications Distribution Section, 4800 Forbes St., Pittsburgh 13, Pa. Free. (Report of Investigation 4812.)

#### Health

Transactions of Joint Medical-Legal Conference, Fifteenth Annual Meeting, Administration of Workmen's Compensation laws, Published by Industrial Hygiene Foundation, 4400 Fifth Avenue, Pittsburgh 13, Pa. 1951, 37 p. Price 50c to members, 75c to nonmembers, (Transaction Bulletin No. 17, 1950.)

Transactions of Legal Conference, Fifteenth Annual Meeting. Air pollution—legislative developments; Stream pollution control—legal aspects; Workmen's Compensation legislation; Occupational disease compensation laws. Published by Industrial Hygiene Foundation, 4400 Fifth Ave., Pittsburgh 13, Pa. 1951. 50 p. Price 50c to members, 75c to non-members. (Transaction Bulletin No. 16, 1950.)

Health of Ferrous Foundrymen in Illinois. Published by U. S. Public Health Service and Illinois Department of Health. 1950. 130p. For sale by the Superintendent of Documents, Washington 25, D. C. Price 75 cents. (P.H.S. Publication No. 31).

#### Mines

Questions and Answers on Roof Support in Bituminous-Coal Mines. Published by U. S. Bureau of Mines. 1951. 90 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 25c.

Roof Bolting and Dust Control. Published by U. S. Bureau of Mines. 1951. 8 p. Available from the Bureau, Publications Distribution Section, 4800 Forbes St., Pittsburgh 13, Pa. Free. (Information Circular 7615.)

#### Tools

Use Hammers the Safe Way. Published by U. S. Bureau of Labor Standards. 1951. 12 p. For sale by the Superintendent of Documents, Washington 25, D.C. Price 5c. (Bulletin No. 127.)

#### **Wood Products Industry**

Retail Lumber Yards and Lumber Storage Yards. Standards of NBFU. Published by National Board of Fire Underwriters, 85



# Avoid \$150,000 sparks in your plant — USE AMPCO SAFETY TOOLS

#### How to choose Safety Tools

Per tools subjected to impact and/or torque — specify tools of Ampco Metal.

For tools with cutting edges and gripping teeth—specify Ampco beryllium-copper tools.

Por jobs around acetylone and certain other gases specify Ampco Monel<sup>o</sup> tools.

\*Trademark International Nickel Co. A few dollars invested in non-sparking Ampco Salety Tools could prevent hundreds of costly fires and explosions which strike unexpectedly every day. That's why Factory Mutual Laboratories and other safety authorities approve and recommend Ampco Safety Tools for use in hazardous locations.

Equip your workmen with Ampco Safety Tools. You earn lower insurance rates, improve workers' morale for greater efficiency — and protect your plant against paralyzing disaster. Send for free Safety Tool Catalog.

"AMPCO-ize to Economize"



### Ampco Metal, Inc.

Dept. NS- 10, Milwaukee 15, Wisconsin

West of the Rockies, it's the Ampco Burbank Plant, Burbank, California



#### NEW Sani-Dri Brings You Basic Improvements **Never Before Possible!**

Amazingly fast drying time - plus the advantage of cleaner, more sanitary washrooms - make the New Sani-Dri popular wherever it is installed.

Now you can be sure of providing fast, efficient hand drying service . . and save continuing towel expense. Saves washroom maintenance costs too! No empty towel cabinets to fill. No unsanitary waste containers to empty or become a fire hazard.

The new Sani-Dri is available in two models -- No. 8-SWA Hand dryer for washrooms; and No. 8-SWH Hair Dryer for Shower rooms, produceto Both models are easily mounted to the wall and carry the Underwriter's Seal of Approval. Investigate this new fasterdrying Sani-Dri today!

#### ONLY SANI-DRI ELECTRIC DRYERS GIVE YOU ALL THESE FEATURES

- · New, improved heating element.
- Larger meter and blower than any other dryer.
- Instant Starting Automatic Shut-off
- New Circuit-Breaker Prevents Damage.
- Cast Contruction . . . Built to

Write for New Literature Send for new illustrated brochure and specifica



Manufacturers of Stools, Table Bases and Costumers for Restaurants and Seda Ferntains.

Distributors in Principal Cities

#### THE CHICAGO HARDWARE FOUNDRY CO.

"Dependable Since 1897

10101 COMMONWEALTH AVE. NORTH CHICAGO, ILLINOIS

John St., New York 38, N. Y. 1951. 7 p. Free. (NBFU Pamphlet No. 47.1

#### MAGAZINE ARTICLES

#### **Accident Statistics**

Injury Rates in Manufacturing, 1949-50. A Graphic Analysis. (In Monthly Labor Review, July 1951.

#### **Aeronautics**

Aircraft Carrier Pushbutton Fire Fighting. By Richard L. Twe. (In National Fire Protection Association Quarterly, July 1951. p 56.)

#### Civil Defense

You Can Tighten Plant Security with Planned Outdoor Lighting-Here's How. By J. S. Lindsay. (In Power, August 1951, p 86.)

#### Commercial Vehicles

Safety in the Trucking Industry. By Charles Hock. (In Motor Transportation, August 1951, p 26.)

#### Construction

Minnesota Engineers and Contractors Cooperate for Safer Traffic Flagging Through the Job. By C. L. Methoen. (In Roads and Streets, August 1951, p 36.)

10 Safeguards to Cut Bridge Crane Accidents. By W. E. Burbank and others. (In Factory Management and Maintenance, August 1951, p 84.)

Control of Dust by Water Mists. By Kenneth W. Nelson, (In A.M.A. Archives of Industrial Hygiene and Occupational Medicine, July 1951, p 28.)

#### Fire Protection

Carbon Tetrachloride Bulbs and Bombs. By O. J. Hodge. (In National Fire Protection Quarterly, July 1951, p 70.)

Fire Casualty Statistics. By Halbert W. Dunn and Evelyn H. Halpin. (In National Fire Protection Quarterly, July 1951, p 45.)

Newark Propane Storage Blasts Show Extreme Hazards Involved. (In Fire Engineering, August 1951, p 614.)

Theory of Fire Hazard Relativity. By Chester I. Babcock. (In National Fire Protection Association Quarterly, July 1951, p 12.)

#### Health

The Industrial Hygiene Program in Industry. By Frank A. Patty. (In American Journal of Public Health, Part I, p. 971.)

#### Hospitality for "Sidewalk Superintendents"



INSTEAD of regarding spectators as a nuisance and a potential liability, many contractors now appreciate the public relations value of providing a safe spot where they can watch operations. This observation booth was erected by Turner Construction Company during the construction of the Mellon-U. S. Steel Building in Pittsburgh.



HERE ARE THE FIRST REAL

# CHEMICAL SAFETY SHOES

#### EVER DEVELOPED FOR THE CHEMICAL INDUSTRIES!

Completely stitched with DUPONT THREAD OF DACRON (Praised so highly in recent edition of LIFE Magazine). For added service, the vamp lining is made of FABRIC OF DACRON. This, plus the RICO plastic TOLEX lining beneath the toe caps virtually eliminates worn-out linings!

IMPERVIOUS TO FOOT ACIDS AND PERSPIRATION CUTS DOWN SOCK WEAR

Severe laboratory and plant SULPHURIC and NITRIC ACIDS, tests prove that RICO CHEM SHOES are really the answer to the Chemical Industry's shoe problems. • After being exposed for 64 days in such showed as much as 68% origchemicals as HYDROCHLORIC,

BLEACHES and CAUSTICS, Thread of DACRON showed practically no loss in strength, whereas conventional thread inal strength lost!

. UPPER LEATHER IS ESKIMO CALF-TREATED FOR CHEMICAL RESISTANCE.

FEATURES! FOR CHEMICAL RESISTANCE.

\* THICKER IS IRON DUPONT PURE NEOPREME
SERVICE SER

RAWHIDE LACES PROVIDE LONGER SERVICE ELIMINATING FREQUENT REPLACEMENT.



CATALOG -"Safety



#### RECORD INDUSTRIAL COMPANY

Dept. CN, 3301 ARCH ST. · PHILADELPHIA 4, PA.







# a little dust or a

### **HOFFMAN**

has the right kind and size of

### VACUUM CLEANING EQUIPMENT

to remove your hazard

Put your dust problem up to Hoffman. Our engineers have helped every type of industry to eliminate dust hazards, including abrasive toxic and explosive types. The complete line of Hoffman vacuum cleaning equipment is built for heavy-duty industrial service... higher suction, greater capacity... available with T.E.F.C. Class I and Class II motors for hazardous locations. Write for Free Survey and descriptive bulletins.



portables

HoffcoVac 15 operates 35-foot length of hose



HaffceVac 30 operates 50-foot length of hose

Also, HoffcoVac 50 and 75 for use with longer hose lengths, on heavier dust accumulations. PLUS Gasoline-Engine Powered Model.

Hoffman also builds Multi-stage Centrifugal Blowers and Exhausters, for air or gas, in a wide range of capacities, PRESSURES and VACUUM.

### U. S. HOFFMAN

MACHINERY CORPORATION
AIR APPLIANCE DIVISION
TOI FOURTH AVE., NEW YORK 3, N.Y.
CANADIAN PLANT: NEWMARKET, ONT

Occupational Cancer and Other Health Hazards in a Chromate Plant. A Medical Appraisal. By T. F. Mancuso and W. C. Halper. (In Industrial Medicine and Surgery, August 1951, p. 358.)

Occupational Diseases Transmitted via Contact with Animals and Animal Products. By Herbert K. Abrams and Patricia Warr. (In Industrial Medicine and Surgery, August 1951, p. 341.)

Outbreak of Psittacosis (Oxnithosis) from Working with Turkeys or Chickens. By J. V. Irons and others. (In American Journal of Public Health, Part I, August 1951, p. 931.)

Toxicity of Carbon Monoxide and Hydrogen Gas Mixtures. By R. H. Moses and others. (In A.M.A. Archives of Industrial Hygiene and Occupational Medicine, July 1951, p. 53.)

#### Lighting

Safe Lighting is Everybody's Business. (In Modern Machine Shop, August 1951, p. 136.)

#### Mine

Selling Safety to New Miners. (In Coal Age, July 1951, p. 73.)

#### Rone

Rope Need Card. (In Modern Industry, August 1951, p. 18.)

#### Pressure Vessels

Design Closed Vessels to Withstand Internal Explosions. By E. W. Cousins and P. E. Cotton. (In Chemical Engineering, August 1951, p. 133.)

#### Safety Stunts

Sell Safety on a Family Basis. (In Coal Age, August 1951, p. 94.)

#### Textile Industry

Prevent Tomorrow's Fires by Good Electrical Installation Today. By Swaffield Cowan. (In Textile World, August 1951, p. 131.)

#### Tough Foremen Boost Accident Rates

FOREMEN WHO TEND to be little dictators increase the accident rate of their workers, a survey by the University of Chicago Industrial Relations Center has revealed.

Speaking before a recent meeting of the American Psychological Association in Chicago, Charles W. Nelson, research associate at the university, reported on a survey which showed autocratic foremen had accident rates among their subordinates four and five times greater than the average foremen in the same plant.

Nelson studied the five-year accident rate of a heavy machinery assembly plant which employed five thousand workers.

The average department has six accidents a year resulting in time lost from work. Two departments, where the work was no more dangerous, had 26 and 22 accidents a year.

When the foremen in these departments were shifted to others, the accident rates in their new departments went up. The accident rate in their old departments dropped as other foremen were brought in.

The personalities and work attitudes of the foremen were classified in a psychological test which ranked them in four categories.

The foremen who ranked high in autocratic attitudes toward their jobs were those who tended to have high accident rates.

Explanation for the accident rates came from a study of ten workers who had many accidents compared with ten who had none.

Workers with high accident rates tended to become frustrated easily, and reacted toward frustration in ways that did not help in solving the difficulty. They also tended to mouth conventional safety slogans while their own actions contradicted their statements.

They admitted their own responsibility for accidents, which indicates that resentment against an autocratic foreman might be taken out on themselves. This tends to confirm earlier studies of accident-prone workers.

Workers who had no accidents blamed accidents on the speeding up of the pace of the work by foremen. Working under pressure at the faster pace resulted in accidents.

These accident-free workers kept working at a steady pace and refused to be speeded up under pressure.

The studies on safety reported by Nelson are part of a larger study of the role of foremen under way at the Industrial Relations Center.

### Best friends a worker ever had!

STAS/AFE

Longer Lasting Greater Comfort More Protection

### **Protective Garment Family**

ACID, ALKALI, and SOLVENT resistant garments
of every design. Where there's a need for worker
protection, there's a StaSafe garment to fit.

**GRA-LITE** 

For jobs requiring maximum chemical resistance and wear, StaSafe GRA-LITE is the recommended leader. GRA-LITE offers a tough, resilient fabric—as much as 40% lighter than other impervious fabrics.

The following garments may be had in any of the above three materials.

- WAIST TYPE APRON
  - SPLIT TYPE APRON
    - BIB OVERALL
      - COVERALL



StaSafe MAROON is lightweight and long-wearing. Designed to offer protection against oils, many acids, caustics and solvents. It is also resistant to flame! Less expensive than GRALITE, StaSafe MAROON is a practical garment for jobs where body protection is important. Like GRALITE, MAROON garments are offered to you in many variations of design.

- OPEN-BACK JACKET
  - SLEEVES
    - SPATS
      - · COAT
- S AIR-LI

A third leader . . . AIR-LITE garments are made of electronically sealed, unsupported vinyl film and are designed to fulfill the need for extremely lightweight protective clothing. Ideal for laboratory use and work not requiring a heavier protective fabric.



AIR-LITE

For further information on garments suited to your needs-Write today for booklet No. 531.





#### **Protect Operators • Increase Production**

Wiesman cam-action press guards enable operators to work at top speed without fear of accident. Guarding is effective and completely automatic . . . does not hamper operator's vision or movement. For all sizes and styles of presses. Used by hundreds of firms. Inexpensive . . . easy to install.

18	Write for descriptive folder and 30 day fRff trial ofter.			
Name_				
Addres				
Title				
Wies	nan Manufacturing Co.			
	St. Clair Street . Dayton 2, Ohio			

### Guide Pin Covers



#### PROTECT OPERATOR

Effectively guard against injury to operator, die and press on operations where bushings leave the guide pins. Protect pins and bushings from chips and dirt when entire pin and bushing are covered. Inexpensive, easy to ottach.

Felt Oiler top units		4		4
	rication.		2	
P.			0	
1	WRITE TO			
Name				
Address_				
Title				

Wiesman Manufacturing Co.

#### Great White Fleet

-From page 145

siderable force without too much effort. Through continuous resharpening, the center of gravity is gradually shifted nearer the handle. This alters the balance of the machete and influences the control and coordination of the user, and a whack across the knee often follows.

Measures that the company has taken towards modifying the weight, shape, size or appearance of the standard machete have met with overwhelming resistance from the users. Research continues, however, and experiments are being conducted with a knee protector to be worn by workers.

Besides being one of the world's largest agricultural concerns, United Fruit operates 67 vessels, and one of the world's largest fleets of fully refrigerated steamships.

Perhaps nowhere else is the stake in safety greater than on board a ship at sea, for the entire crew and the vessel itself may become victims of an accident which ashore would have no serious consequences. It is, therefore, routine procedure on ships of the Great White Fleet to maintain the highest safety standards in equipment and deportment. Every ship's officer, as a part of his basic training, is made highly safety conscious and must become proficient in advanced first aid.

Aiding the men who sail the ships in achieving high safety standards is a traveling safety inspector who makes frequent voyages on the ships at random, periodically covering the entire fleet. On his trips, he observes the standards maintained on each ship, discusses accidents, improved procedures, and new regulations, and in general stimulates the interest of the ship's personnel in safety problems.

On the company's piers and wharves, where stevedoring operations are involved, the problem is somewhat different; the scene of action is apt to be more confusing and the personnel less skilled. United Fruit's approach here—as in other phases of operation—has been to convince its employees that it is his own life

and limb that the company is trying to protect. Enthusiastic support of supervisory personnel has helped put this idea across, as has the company's rigid policy of keeping its handling equipment in topnotch condition.

The New York Division, for example, has adopted a color-code marking system for all lifting gear which readily indicates the safe working load of the machines, slings, bridles and other equipment. Accidents that do occur, no matter how minor, are given full study, so that circumstances leading to it can be brought to the attention of those responsible and repetition avoided.

United Fruit's health and safety programs can be measured in positive terms-increased labor efficiency, reduced absenteeism, lower liability and compensation expenditures, fewer hospitalized employees, uninterrupted steamship schedules due to the absence of quarantinable diseases and epidemics of infectious diseases: and its worth has been thoroughly demonstrated over the past half-century. Men and women of United Fruit aren't content with history. Through forward-thinking application of proven techniques and development of new concepts, they're contributing mightily to making Middle America a constantly better place in which to work and live.

#### Paul Bunyan's Nephews

-From page 113

operation is something very different from handling it in a factory. Two or three heavy logs are hooked to a heavy cable and hauled in by powerful donkey engines. Communication between the choker setters in the woods and the engine operator are by whistle signal. The logs are hauled, crashing through underbrush, scarring the wet soil, knocking off slabs of bark against occasional rocks. The landing to which logs are dragged is merely a roughly cleared area dominated by a high spar tree which anchors the rigging for the yarding work.

As soon as the logs hit the landing, the chaser races along them to unhook the chokers (the clamped cable loops that go around the

# KLEAR-VU SAFETY ACCESSORIES

mean Safety First - Last and Always

PERFECT RESISTANCE TO DUST FLAME ACID. OIL AND WATER!

PRICED RIGHT!

STYLED ATTRACTIVELY LIGHT IN WEIGHT EASILY CLEANED!

Thousands of leading safety engineers . . . men who know that minimum risk means maximum production . . . insist only on Klear-Vu Safety Caps, Safety Aprons and Safety Arm Guards to protect workers.

Maintain Peak Production-Protect Your Workers - Boost Morale - Reduce Overhead -

WRITE TODAY FOR SAMPLES AND PRICES!





# SHOWS PRACTICAL ATOMIC BOMB DEFENSE FOR PLANTS AND PERSONNEL

- · How to protect your people and your property
- · How to build up a plant-wide defense program
- How and where to make shelters
- · How to select your Chief Warden
- How to recruit a Defense Corps
- · How to set up a central control room
- · How to set up a first aid room
- How to safeguard your important records
- What to do RIGHT NOW against the possibility of atomic attack

**TARGET: U.S.A.** is the most realistic, practical project of its kind. It was made by the makers of PATTERN FOR SURVIVAL, awardwinning film on safety and civil defense.

**TARGET: U.S.A.** covers your defense problems in dramatic terms. It can save lives and property in factories, office buildings, hotels, hospitals, railroad installations . . , every establishment where many people work or live.

#### SHOW THIS URGENT FILM AS SOON AS YOU CAN

Get in touch with your film dealer right now. For more information, write to Cornell Film Company today.

Available in 16mm sound, both in full color and black-and-white.

2 reels. Running time, approximately 20 minutes.

Distributed exclusively by

CORNELL FILM COMPANY 1501 Broadway, New York 18.

logs). On Crown's operation we saw two clear proofs of the effect of long, hard safety work. The chaser waited till the logs came to a complete stop before heading out to unhook, and the engineer waited till the chaser was in the clear before sending the chokers flying back out to the woods. Those choker clamps (bells, loggers call them), flying on the end of ten feet of cable, are deadly blackjacks that can crush a skull, even a hard-hat protected skull.

The process of hooking on and unhooking is repeated during the loading operation, in which the yarded logs are placed by a crane or hoom.

A Crown-Zellerbach superintendent, Lou Rees, has invented a new device to reduce exposure to hazard in the loading operation. It is called the air-tong loader, and it is built much like a steam shovel. But the boom supports. not a bucket, but a pair of tongs. much like ice-man's tongs. These can be opened and closed by a pneumatic system controlled from the operator's seat, instead of having to be placed and released by hand as on a normal loader. No man has to go near the logs in the whole loading operation.

Air-tong loaders are a new idea, but we saw one operating on a relogging operation above Molalla, and the contractor was proud of its efficiency as well as its safety features

Perhaps the most striking feature of the Molalla operation is the privately owned Forest Road which Crown and Weyerhaeuser maintain to get logs from the hills to the river dump. In its 30 odd miles, the road drops 4,000 feet, and over it roll the great trucks with their 50 ton pay loads. The trucks carry 200 gallon water tanks solely to cool the brakes, and the normal run uses two tanks full of water on a downbound trip.

Wherever the road crosses public highways, one of two crossing safeguards has been built. Either the road crosses the highway on an overpass or the crossing is signalized with lights which are actuated magnetically when a truck approaches. These are timed so that a truck running at 20 miles an hour finds the light turning

# For Safety's Sake Use ...

# DAYTON SAFETY LADDERS AND SHOES

"Listed by Underwriters' Laboratories, Inc."



#### DAYTON SAFETY LADDERS

Maintenance men everywhere rely on Dayton Safety Ladders for maximum safety and convenience. Daytons are constructed of tested airplane spruce and reinforced with rigid steel supports to give great strength and lightness of weight.

Handrails of steel guard the large roomy platform for added safety. Half of platform can be raised to form an extra step, when needed. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use.

Sizes 3 feet to 16 feet in height with standard rubber safety shoes at no extra cost.

#### **DAYTON "ROLL-ALONG" SAFETY LADDERS**

... The Dayton Roll-Along Safety Ladder with its rubber tired swivel casters can be speedily moved in any direction with practically no effort.



Safety shoes with renewable treads hold ladder permanently and safely in place while ladder is occupied. Constructed of tested airplane spruce throughout and reinforced with steel braces for additional safety. Folds compactly for convenient storing. Available in sizes 3-ft., 41/2-ft. and 6-ft.

Elevating auxiliary platform which folds back in main platform adds height if desired. These ladders are being used in many of America's largest plants. See for yourself! Write today for bulletin.



# DAYTON SAFETY LADDER SHOES fit any standard ladder rails ... easy to install

Install Dayton Safety Ladder Shoes on your present straight ladders—guarantee additional safety, prevent slipping.

Shoe instantly converted for either indoor or out- proper adjustment.

Shoe or base is made of No. 16 gauge and the side plates are of No. 13 gauge steel. Suction grip treads are renewable. Lock nuts and spring washers insure proper adjustment.

Write today for Bulletin No. D-8

# DAYTON SAFETY LADDER CO. 2237 GILBERT AVENUE CINCINNATI 6, OHIO

In Canada - SAFETY SUPPLY COMPANY - Toronto



green just before he reaches the intersection.

Finally, the road is patrolled by a privately-employed safety officer, an ex-state-trooper. He educates the drivers in the rules of the road. He enforces these rules. using his full authority to flag down a badly loaded truck or one driven in violation of the rules. He can file charges which, in the more drastic cases, may result in the barring of a driver from the road. Since trucks of several lumber companies and their contractors are constantly using the road, the patrolman's job is complicated, but tremendously important.

Safety for Crown's timber operations is under the direction of Ted Kepner, but at the individual operations, the "super" is directly responsible. At Molalla, for example, the load falls on Al King, a husky, rawboned, roughly dressed man who learned logging the hard way. And if he has such modern aids as a two-way radio-equipped automobile, he is still primarily the bull of the woods who knows how the job ought to be done and. in a moment's inspection, can spot bad workmanship, which includes violations of safety rules.

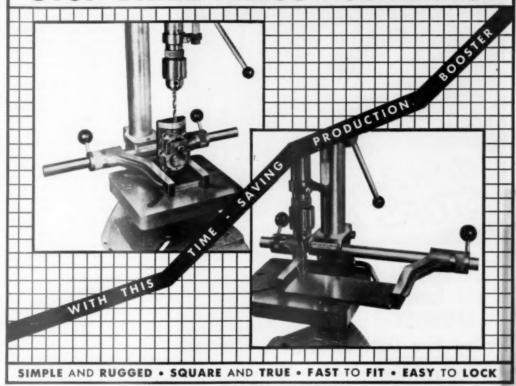
Our next stop was Camp Baker, a Weyerhaeuser Timber Co. installation near Spirit Lake in Washington. Here, though we still find some home-guards (men living at home while working in the woods), a large proportion of the men live in bunk houses, and the day starts early with a yard full of men loading into the crew busses.

Up in the hills we saw our first big "cat" show—an operation where the yarding is done by tractors hauling a short trailer rig called an arch. One end of the logs is hoisted up under the arch, and the cat hauls them in from the woods on a track that it had earlier smashed through the brush with its own bull-dozer blade.

I rode one round trip on a tractor hanging on to a gas-tank cap as one track drove deep into the wet mush while the other broadly climbed two-foot stumps. I envied the operator who had his controls to hang on to.

From the seat of the tractor, I saw a good example of safe choker setting work, which had

# STOP DRILL PRESS ACCIDENTS!



### REMOVES TEMPTATION TO HOLD BY HAND!

IT'S ACTUALLY USED – Welcomed! – by drill press operators. That's because the Universal Safety Work Holder makes attachment swift, simple, solid.

INSTANTLY ADJUSTABLE arms give firm true grip on odd shapes ... on tumble jigs and others. Often saves cost of making one-time jigs, or trying makeshifts.

NO BOLTS OR CLAMPS to hold vise when needed. And the true alignment—the square-machined faces—automatically provide parallels.

MADE IN TYPES to fit round or box columns... the Universal Safety Work Holder safeguards men, production schedules and costs with mere nominal investment. (\$20 to \$31.50 each.)

CAST IRON

Arms and Collars

STEEL Cross Rod

CHROME PLATED

Working Parts

SQUARE-MACHINED

Arms, Faces, Tops, Bottoms

MAN-SIZE

Lock Knobs and Levers

■ Write for details of models, specifications and prices.

# **UNIVERSAL WORK HOLDERS**

UNIVERSAL VISE AND TOOL COMPANY

Parma, Mich.

## Fire can START anywhere



The effectiveness of AKBAR Fire Doors has been proved in major conflagrations throughout the country. When fire threatens, their quick, positive, automatic action stops dangerous flame-spreading drafts by blocking openings with a curtain of steel.

In emergency release, the doors are pushed down by a strong spring, to assure positive action. However, this automatic action also provides for the safety of building occupants in several ways. Downward speed of the doors is regulated, as a safety measure for anyone passing underneath. And the doors can be opened after closure, for emergency exit. Another device stops the door at floor level, with the steel curtain covering the entire opening—the door will not sag, or drop through a fire-weakened still.

When not in use, the heavily galvanized curtain of interlocking steel slats remains coiled overhead, out of the way. Approved by Underwriters' Laboratories, Inc., they have saved as much as one-third of their cost per year in reduced insurance rates.

AKBAR Doors can be installed in openings of any size, in old or new buildings. They can be equipped for regular, daily door service, with motor operation if desired. However, the regular Kinnear Steel Rolling Service Door (non-labeled) is designed for use where maximum fire protection is not required. Write today for Kinnear's latest catalog.

#### The KINNEAR Manufacturing Company

Factories 1720-40 Fields Avenue, Columbus 16, Ohio 1742 Yosemite Ave., San Francisco 24, Calif.

Offices and Agents in All Principal Cities



been described to me by George Joy, Weyerhaeuser's safety man for the area.

The old tradition in the woods was for the choker setter to "hook on while they're hot"—to charge in while the yarding equipment was still moving, grab a swinging bell, hook it around the log, and run like mad as the log started to move.

My operator backed his tractor and arch against a log and stopped. Then, and only then, the choker setter came out of the brush, hooked on, and then got in the clear before the tractor started forward.

Weyerhaeuser is efficiencyminded. It likes fast work and high production. But it is hammering into its woods' crews, including choker setters, the necesity for allowing a margin of safety when the heavy logs and yarding equipment are in motion.

Weverhaeuser's timber around Camp Baker is known as a tree farm-a precise legal term in this day of conservation. Under terms of an agreement with the government, forestry methods are being practiced that guarantee a perpetual vield of timber from this land. There is no more wasteful stripping of the land and leaving it to burn. As Clyde Corman, logging manager, explained to us, cutting is done economically, regeneration is encouraged, fire protection is maintained. When present stands are gone, new timber will have grown to cutting size. Weyerhaeuser even has provided for public recreation needs, setting aside camping areas in scenic spots, where fire protection is available easily, where the campers won't stroll into areas where active logging is going on.

Our third day was on Long-Bell property out of Ryderwood—a model logging town of a generation ago which will be a ghost town before this winter is over. For perhaps 20 years, beginning in a few months, the timber back of Ryderwood will be the domain of a small group of company foresters, working on roads, protecting against fire, applying scientific techniques of pest control and stimulation of regeneration. Then the area will be back in produc-

tion, but the present town of Ryderwood will be gone, the roundhouse and freight yard will be weed-grown rust. Smaller camps will come to life in the 1970's, and gravel roads will replace the railroad in the hills. And that area will be, after a lapse of time, on a sustained yield basis.

Ryderwood gave us a good look at railroad logging-a rapidly dying type of work. The large freight yard already contains much defunct equipment, but the last cleanups of timber in the hills use the old workhorses of the woods-the off-balanced Shav locos, the gigantic electric skidders that operate in certain varding situations. the lines of flat cars, and the impertinent modern gasoline speeders that gallop the winding right of way, that careen blithely across trestles where you look down at your feet and see, below them. creek beds 500 feet below.

Dispatching on a logging railroad is something to amaze a man who has stood beside a centralized train control setup on a major railroad or even has watched an automatic block signal system in operation. On the logging road, telephone boxes stand beside the track every mile or so and at every junction. Each train or speeder calls in at each phone. The dispatcher back at Ryderwood has a board-mounted map of the railroad before him, and he spots the position of each piece of equipment by sticking pins in the map at the proper places. This primitive system permits him to tell the engineer whether or not it is safe to proceed to the next section of the railroad.

But it isn't wise to underestimate the efficiency of the Ryderwood operation. Electric power is used extensively in the woods—power generated in a power plant at Longview on the Columbia. which uses as fuel the waste wood and sawdust of the great Long Bell sawmill. The great skidders are heavy, unwieldy pieces of equipment by modern standards, but they haul the logs in as well as anything ever made by man.

Another example of Long-Bell efficiency is the state of the landings. On this point, the experts are talking, not your author. To



\*17% of the 222 occupational injuries which occur every hour are due to falls. Source: National Safety Council's 1949 edition of Accident Pacts.

# Special Absorbents Provide Easier Floor Maintenance-Safety



These two proved absorbents, called Quik-Sil and Aqua-Lic, are specially compounded to absorb completely and quickly dangerous oil, grease and water-base substances from floors, thus helping to prevent slipping accidents and fire.

Approved by Underwriters Laboratories, Quik-Sil and Aqua-Lic are amazingly effective absorbents. Quik-Sil absorbs oils, greases, kerosene, naphtha, oleum spirits, gasoline, thinners, and any mineral oil base material. Aqua-Lic dries up water soluble lubricants, water-base coolants, soap water solutions and grinding compound emulsions.

One of the most important features of Quik-Sil and Aqua-Lic is their fire resistant properties. They do not burn. In addition, they make floors skid-proof.

Quik-Sil and Aqua-Lic are ideal absorbents for metal working plants, machine tool builders, aircraft plants, factories, railway repair shops, oil storage rooms, paint shops, car barns, textile plants, shipyards and filling stations.

Free test samples of Quik-Sil and Aqua-Lic are available upon request. Send inquiries on your company letterhead to the manufacturer. The Diversey Corporation, Maintenance Products Dept., 1820 Roscoe St., Chicago 13, Illinois. In Canada: The Diversey Corporation (Canada) Ltd., Lakeshore Road, Port Credit, Ontario.

Another outstanding product you will want to investigate thoroughly is Diversey Elektro-Purj-It. This amazing multi-purpose cleaner is ideal for all general plant cleaning . . . removes dirt and grime like magic and at a cost of less than 2 cents a gallon. Write for free sample.

an outsider like myself, any logging operation seems the wildest confusion and litter—and a landing is a place in which confusion seems confounded.

But what people like Dan Adair mean by good landings is just what a factory safety man means when he talks of good plant layout —room enough to do the job, a practical arrangement, and—in the woods—a relatively level surface.

To the guy like me, a landing is just a small cleared space by a road or railroad track. If it is in active operation, it is red with the churned mass of mud and fresh bark and wood fragments. A deserted landing turns grey as the mud dries and the old wood turns the color of old waterfront pilings. Only after some years will the landing turn green with young trees and blaze with the glory of Scotch broom and rhododendron.

I don't mean to be cynical about those landings at Long-Bell—I believe implicitly what Dan and the Ryderwood people told me about their quality. But good plant layout means one thing in a distillery, something else in a foundry, something yet again in heavy construction—but compared to any of these, a well-layed-out logging landing is a fair imitation of a nightmare.

At Long-Bell we saw the operations most typical of logging to the layman—falling and bucking. Here the falling was being done with power saws, the bucking by hand saws. And if there is something spectacular about the actual falling of a great forest giant, careful calculation of angles, the warning shouts, still, some of the old-timers will tell you that the unspectacular bucking (sawing of the tree into log lengths) is the more skilled and sometimes the more dangerous operation.

For example, the bucker whose picture appears with the article had a fallen tree which lay in such a position that it was likely, when cut, either to split badly or to roll down a slope. The first possibility meant a heavy loss in good saw lumber. The second meant serious danger to the bucker.

This bucker had all the possi-

bilities in mind. He made his cuts judiciously, on top, underneath, to one side. When the log was finally sawed through, the two ends jerked a few inches, the two faces met, and held each other.

Incidentally, you will hear always in logging of the problem of falls-just as you hear of falls in every industry which studies its accident problem. But I had to get off the roads to find our Long-Bell fallers and buckers. My cork (logging for caulked) boots with their inch-long spikes has seemed silly on gravel, but once into the timber I learned that in the confused litter of logged land, the only good walking is the tops of logs-logs drenched in rain, logs alternately bare and capped with ragged fragments of bark. And these log pathways sometimes lead across deep gullies whose bottoms are an indescribable mass of broken limbs, jagged rocks, tangled briar.

Then, if you are a greenhorn, you plant your feet deliberately. enjoying the tight feel of your footing when the corks bite deep. In doing this, of course, you provide merriment for those superior souls who are real loggers-who move lightly and swiftly over the same route you take so tediously.

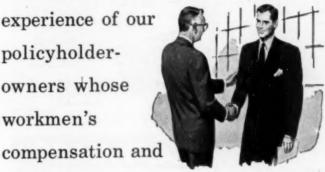
But they do fall-and falls loom large in the picture of accidents in an industry which has a high over-all frequency rate.

After we'd done the woods, Long-Bell's safety man Bob Miller and Ryderwood's super Charles Cory took us to see one of Ryderwood's monuments to progressive management-the MAP. In a small house near company offices it stood, filling a large room-the giant relief map of the whole property which had been made by hand from the first surveys-a map over which a generation of logging superintendents and their staff had pored, planning railroad grades, lining up yarding routes, deciding both major strategy and minor tactics in translation of timber stand to merchantable lumber.

Here are some general comments that apply to all the logging operations we saw. First of all, logging is still proud of its Paul Bunyan tradition. You see that pride in the way the good comGood people..."We

have found Employers Mutuals good people to do business with!" These homely, meaningful words express the

experience of our policyholderowners whose workmen's



other business insurance is handled by an Employers Mutuals Team. You and your whole organization stand to profit from the skilled teamwork of



**Employers Mutuals** specialists!



# EMPLOYERS MUTUALS

Home Office: Wausau, Wisconsin

of WAUSAU

Offices in principal cities . . . Consult your telephone directory

Employers Mutuals write: Workmen's Compensation-Public Liability-Automobile-Group Health and Accident-Burglary-Plate Glass-Fidelity Bonds-and other casualty insurance. Fire-Extended Coverage-Inland Marine-and allied lines. All policies are nonassessable.



EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY OF WISCONSIN EMPLOYERS MUTUAL FIRE INSURANCE COMPANY



L. E. WARFORD, President In Canada: 206 N. May St., Fort William, Ont. panies feed their men, in the rough talk and rough dress, in the unassuming strength of the top men and the simple, direct trade slang of the woods, buck, fall, bull-buck, whistle punk, bull of the woods, cat show, skidder, high lead, hook tender, choker setter, donkey puncher, rigging slinger. They tell you, and its almost true, that the roughest dressed guy on the property is probably the super.

Costume is completely functional. Suspenders of a broad, substantial type, or the least likely to let pants fall on a job in which a man could be completely unembarrassed if his pants fell, but he might be seriously restricted in leaving a spot in a hurry—and leaving certain places in a hurry is a frequent necessity in logging. Similarly, pants are "stagged", i.e., cut off fairly high on the calf of the leg, so that they are less likely to be snagged while walking or running in brush.

Shoes for the logger are highly standardized. To support the long corks (caulks), special soles of extra strength are needed, and the logger today pays \$30 to \$50 a pair. He would rather work nude than work slick shod.

In one respect, woods' fashions have been revolutionized in the last few years. The hard hat has arrived. Governments of both Washington and Oregon demand their use. Companies enforce the rule toughly. In my three days on three different company properties I never saw a man without a hard hat except two or three truck drivers who worked for contract haulers. And the safety men I was with made it clear that even such men would not last long without coming into line and wearing their hats.

The stories of the introduction of the hard hat are legion and fantastic. Every possible objection had been raised to their use. They were uncomfortable, men said, they were heavy, they were hold, they were sissy. So sometimes a branch hit a man—so what? Logging was tough.

But a few crusaders (one of them was Dan Adair, my guide this trip and formerly supervisor of safety for the State of Washington) took hats to the camps.

They persuaded a few stray men to try hats. Helped by a number of those God-given coincidences, they soon had a file of case histories of healthy men whose hats had saved their lives.

Gradually, by a process that is worthy of a careful historical study, opposition crumbled, state codes were adopted, companies backed the play, unions went along.

In Oregon and Washington at least, the hat is everywhere in the woods-and it is there to stav.

I think-and there are some logging men who agree with methat the victory for safety that the hard hat in the woods represents is symbolic of other victories to come. Progressive logging companies are improving their acciden records-and becoming more conscious of the need for greater progress.

#### Fire Detection

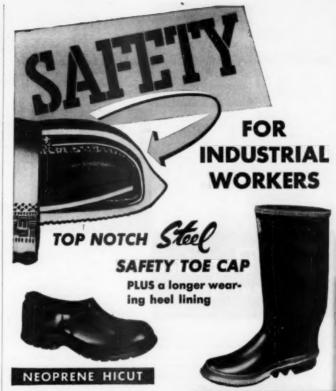
-From page 101

are designed to detect only unfriendly fires.

There is no one best type to take care of all fire protection problems. Each type has its own special application, and each set of hazards and conditions requires its own particular remedy.

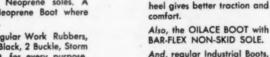
First, there is the old wellknown fixed-temperature device. There are many different kinds of these, but they are all designed so that an alarm is initiated when a predetermined or fixed temperature is exceeded. Although these are the oldest of the automatic fire detectors, they are by no means outmoded. Some of them are of a self-restoring type and therefore may be tested at will. Others (of the melting type, for instance) are destroyed upon operation.

The most commonly used and most generally applicable automatic fire detection system is a rate-of-rise system of the pneumatic tube, line type. Such systems consist of continuous lines of small copper tubing containing air at normal atmospheric pressure and temperature. This tubing is run in loops or circuits on the ceilings of protected areas. Each such circuit terminates in small air chambers, the walls of which are pressure-actuated diaphragms.



Maroon Neoprene uppers to withstand oil, grease, and acids, Non-skid Design and Molded Neoprene soles, A short Neoprene Boot where needed.

Also regular Work Rubbers, Red or Black, 2 Buckle, Storm or Hicut, for every purpose.





10" Height, side strap adjustment, gray Non-skid Design Outsole and Heel.

Also available, a Blucher Lace Style, with, or without Steeltoes.



BAR-FLEX

Patented outside arch and

all heights, plain or steeltoes.

BOOT

#### WORKIN

6" Work Shoe with Non-skid Design Outsole, plain or Steeltoe.

#### BEACON FALLS RUBBER FOOTWEAR DEPT. I. BEACON FALLS, CONNECTICUT

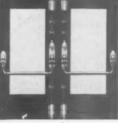
Get your exits



ready for increased traffic



Call in your



Von Duprin "EXIT ENGINEER"



● Increased production for your plant means more employes, more traffic, more need than ever for safe, dependable exits. Call in your Von Duprin "Exit Engineer" now for a free survey of your exit requirements. From actual experience, he can recommend the right Von Duprin exit devices to give you the greatest safety and service. Von Duprin is the most complete line of approved exit devices. From this one line, you can meet all your present and potential exit hardware needs. If you don't know the name of your nearest "Exit Engineer," write Von Duprin.

Free! Reserve a showing of Von Duprin's 20-minute sound movie, "Safe Exit." Build a lively safety program around this interesting public service film. Write for a booking.

VONNEGUT HARDWARE CO. . VON DUPRIN DIVISION . INDIANAPOLIS

# Von Duprin Fire and Panic Exit Devices

THE SAFE WAY OUT!



Upon a rapid rise in temperature due to a fire condition, the air in the tubing becomes heated and expands, causing these diaphragms to bulge and make a contact which initiates an alarm. A slow rise in temperature, such as is caused by heating systems, does not affect the diaphragms because the pressure is equalized by tin breather vents which permit a slow seepage of air in and out of the tubing.

This system can be easily tested without destroying the fire detection devices. It may also be supplemented by fixed-temperature devices to take care of places where sudden rises in temperature may be normally expected. This type of system is easily and inconspicuously installed in any interior. It has protected the White House since 1936 and is being reinstalled as part of the White House reconstruction. It protects many of our vital interests, such as atomic energy installations, medical supply warehouses and service hospital buildings.

Another rate-of-rise fire detection system employs thermopiles. Each thermopile consists of a series of thermocouples which have the property of converting heat energy directly into electrical energy. These are arranged so that one junction of each thermocouple is placed behind a shield, and the other, though adjacent, is exposed to room temperature. The outside junctions are enclosed in a parabolic reflector which concentrates any heat upon them and they therefore respond very quickly to changes in temperature while the shielded junctions do not.

This causes a temporary temperature difference between the hot and cold junctions sufficient to produce a current flow capable of initiating an alarm. These thermopile devices may also be tested at any time without being destroyed. Their value is in their extensive range, and in their ability to detect fires despite forced draft conditions.

There are many spot-type contact making fire detectors available. These may be of the pneumatic or bi-metallic type. Such devices are installed on the ceiling of the protected area on a defi-

-To page 200

# FIRST THOUGHT FOR FIRST AID

**Vaseline Sterile Petrolatum Gauze Dressings** 

Chesebrough Mfg. Co., Cons'd · New York 4, N. Y.

Professional Products Division

VASELINE is the registered trade-mark of the Chesebrough Mfg. Co., Cons'd

To Open foil-envelope, cut with scissors along dotted line on back of envelope...or in an emergency, tear off seal carefully below this line...end of dressing is pulled out of envelope with one hand (use forceps, if handy), while envelope is held with other hand.





COVET damaged surface and area two inches beyond with two layers or more of petrolatum gauze dressing... then apply sterile dry bandage to keep clean and hold gently in place—using first-aid principles... have injury examined by a physician.

# always sterile always ready

For immediate and easy application, to dress a Burn, an Abrasion, certain other Surface Injuries.

ready-made . . . compact . . .

soothing . . . non-sticking . . non-contaminating . .

USED DIRECT FROM HANDY



### Two Sizes:

Unit envelope: one 3" x 36" dressings Duplex envelope: two 3" x 18" dressings Six envelopes to the illustrated carten

OBTAINABLE FROM YOUR

# SAFETY FLOOR FINISH

#### EVERYTHING FOR INDUSTRIAL HEALTH AND SAFETY

You can depend upon Con-Sol Products for every maintenance problem cleaning, insect or bacteria control, floor upkeep, health and safety.

Write Con-Sol technicians without obligation, about any specific health hexard or unusual condition in your plant. Many years of experience and over a hundred industrial housekeeping products are available to solve your every maintenance need.

Helpful Maintenance Chart On Request **Keeps Floors Safe And New-Looking** 

Skidproof gives any type of floor—wood, linoleum, rubber, asphalt, tile or terrazzo—a hard, durable slip-proof surface that protects against the toughest kind of wear. It's easy to apply, easy to clean. It's quick-drying, odorless, economical—one gallon covers 2000 square feet!

Skidproof overcomes the slipping hazards of ordinary wax—makes rubber burns, stains and surface damage easy to get off — won't crack or check—won't discolor any floor surface. It's the finest surface finish available to keep floors shining, beautiful and safe!



Tested and approved by Underwriters Leboratories





#### LEADING MANUFACTURER OF SAFETY GARMENTS

#### PRODUCTS INCLUDE

GLOVES SLEEVES FOUNDRY HIMPER SPATS LEGGINGS SUITS HELMETS PANTS FOUNDRY **OVERSHOES** MITTENS COATS BLANKETS CURTAINS KNEE PADS FINGER ARM MASKS **PROTECTORS** PROTECTORS HAND PADS MADE IN ASBESTOS - LEATHER - FIREPROOFED DUCK

#### HOLCOMB SAFETY GARMENT CO.

118 North Jefferson Street

Chicago 6, Illinois

#### Where Men Can't Go

-From page 95

conveyors and related equipment generally and specifically. It speaks of general design this way: Guard driving machinery; don't load beyond rated capacity; design mountings in such a way that catching sharp edges or chances of pinching are minimized.

Keep lubricating points piped out to safe locations; enable adjustments to takeups or drives to be accessible. Use anti-backups and anti-runaway mechanical safety stops on slopes as protection in the event of chain breakage. Use load brakes as overload cutout protection. Enclose counterweights. Use guard rails. Interlock conveyors electrically to prevent jamming and danger which occurs when one conveyor shuts down and the one feeding it might still be operating.

Watch design of transfer points from one conveyor to another; here lies the possibility of pinch point and dangerous free materials. Make sure supports, particularly for portable conveyors, are substantial to support without tipping under loads.

The code covers clearance and accessibility. Leave space for maintenance, for operators. Provide visibility so oncoming loads may be seen. Up high, provide guarded catwalks. Wherever wall or floor openings occur, guard well with rails; these are dangerous points.

Provide inspection doors and peep holes where conveyors are enclosed. Make proper provision for crossovers, aisles, passages, leaving ample clearance and headroom. With paint, signs and/or lights define clearly these ways of travel.

Under inspection and maintenance, the code suggests the importance of lubrication on a regular basis. Keep takeups properly adjusted, examine periodically cottered connections and couplings for weaknesses. Replace worn parts.

The code advises that related structures such as tunnels, pits, hoppers, chutes, where conveyors are used should be considered in the over-all safety design.

General safety rules might be



Army Retan Upper. Nailed construction. STEEL safety box toe. Style No. 702-\$5.75 Chrome Leather Sole Style No. 200-\$5.20 Heavy Composition Sole

> Army Retan Upper. Nailed construction. Plain toe.

In Stock for Immediate Shipment

In Goodyear Welt Construction All Styles 75 cents Higher

HARRY J. WOLF SHOE CO., SHEBOYGAN, WISCONSIN

Pioneers of Safety Footwear Development







#### HOW TO TAKE A CHANCE

on ruptures, strained backs and sanashed fine gers... fail to use the Prescott Safety Tool when closing hopper bottom car doors with latch-type locks. Write today for free folder which shows the dangers of old-fashioned hand, foot and bor methods and how the Prescott Tool makes the job safe, easy and fast.

The Trumbull Mfg. Co.

built around these admonitions. Obey rated load signs. Mark stop and start stations clearly and make them easily accessible and where they provide a clear view of the conveyor. No riding on conveyors; no stepping on conveyors. Only regular maintenance crews should service conveyors. While servicing, stop the conveyor, and lock out normal starting push-button stations. In case of overload cutouts, locate jam and use lockouts before starting or servicing.

The code refers specifically to its relation and dependence on other codes. These include those of mechanical power transmission-electrical, elevators, dumb-waiters, escalators, cranes, derricks, hoists, buildings, bridges, walkways, floor and wall openings, railways, toe hoards, dust explosions and boiler construction. The ASME, ASA and ASTM code numbers are listed therein.

Turning to specific conveyors, the code suggests briefly: A smooth cover should be used under slat conveyors where there is space between slats to prevent shearing hazards; safety provisions for a man who must ride on a tripper on a belt conveyor: totally enclosed bucket elevators; hand rails, smooth sides, guard plates along chain conveyors will protect hands, feet and clothing; stops are needed at open ends of gravity conveyors; try to eliminate all pinch-points on live roller conveyors; substantial guards with sides under overhead trolley conveyors are desirable; use solid covers on screw conveyors when possible.

The code is a good start. Currently, it is being revised and suggestions are definitely hoped for. The scope is being carefully gone over and more clearly defined. General safety and particularly specific safety provisions will be augmented. Manufacturers and users of specific types of conveyors are now studying how to improve and add to the code.

The work has been divided amongst the specialists and then will be brought together again for coherence. For example, the great field of portable conveyors is being closely studied by that industry and much more will be available on this subject when the code is next revised.

#### 2. Over-all Safety Aspects

Here let's leave the code and discuss the broad aspect as to how far we should go in our safety measures. A friend of mine says there's a difference between "fool-proof" and "damnfool" proof. We don't fence in our highways and streets in order that trucks and autos won't hit people; we use lights, signs, curbs, painted lines. We can go only so far to protect operators from machine tools. They must use the safety features.

Some elaborate guarding is economically as unsound as fencing the highways right at the curb. Sometimes the initial costs might be 40 per cent of the entire installation and, further, greatly limit the advantages and flexibility which could be obtained by the conveyor.

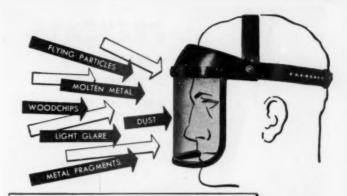
The question might be approached in another way if we say that conveyors as a whole have meant more safety in industry. Materials are brought to and taken away from operators. Lifting and carrying are lessened. The operator, therefore, need not leave his station and walk into trouble elsewhere; nor need he join that unfortunate group who sustain lifting injuries.

Conveyors eliminate manual handling to the degree they are made use of. Material coming to the operator mechanically eliminates momentary inattention to the machine he is operating. Conveyors help good housekeeping because they are installed on definitus lines of flow and their continuous nature cuts down piles of subassembly goods in process.

Less manual handling means less fatigue with its tendency to mistakes. Working along a conveyor at a constant uniform speed, being fed material on an even flowing basis, operators develop a rhythm in their work which makes for sureness and few mistakes.

#### 3. Built-In Safety

Users and manufacturers must work together to reach the right balance of safety in conveyor systems. Greater consumer safety consciousness is a must. In any competitive industry there are those who skimp on safety features to have the lowest price. Users must study bid specifications and



## JACKSON 💢 EVESHIELD

It has shielded thousands of eyes and faces from serious injury. It's featherlight, easy to clean, and has replaceable visors in various lengths, in clear and in shades of green.

Ounce for ounce there's no better buy in eye protection . . . for so many industrial uses.

For Flash Welding and Metal Pouring, with visors in light, medium and dark green,  $0.20^{\circ}$  thick,  $4^{\circ}$ ,  $6^{\circ}$ , and  $8^{\circ}$  deep: type J-1 shield with headrest, type C shield with elastic band in back.

For Resistance Welding, Metal Finishing, Woodworking, etc., with visors of clear plastic .020", .030", and .040" thick, 4", 6", and 8" deep: type J-1 shield with headrest, type C shield with elastic band in back.

#### OTHER JACKSONS SHOWN HERE:

For Gas Welding, Cutting and Brazing, with lenses in F.S. shades 3 thru 6; types W-50, LTB-50 and BX with headrests, type WR-50 with elastic band.

For Chipping and Grinding, with clear, hardened lenses: type G-50 with headrest, type GR-50 with elastic band.

#### JACKSON PRODUCTS

WARREN . MICHIGAN

Sold through Distributors and Dealers near Yea













#### PREPARE FOR DANGEROUS, UNEXPECTED LIGHT FAILURES

#### THE NEW DEFENSE LIGHT GIVES

Instant, automatic emergency lighting protection, plugs into any 110 volt outlet. Uses ordinary 6 or 7½ volt battery. 21 C.P. lamp adjustable head.

Write for literature on wet and dry battery operated emergency units.

#### ELECTRIC CORD COMPANY

195 WILLIAM STREET NEW YORK 38, N. Y.

WORTH 2-2528



### PREVENT

ladder slipping accidents
on ice or snow

USE

Safe-Hi LADDER SHOES

with self-sharpening spike

Dull spikes on a ladder shoe are a hazard on ice or snow. With SAFE-HI LADDER SHOES you know you're always safe because the spike is self-sharpening. A tool steel core, welded between walls of softer metal, wears down first, leaving the hardened core...always sharp because it's thin.

Straight ridges of mixed cord and rubber in the tread will hold on any type of surface.

See your safety dealer or write

Safe-Hi PRODUCTS

spike

self-sharpening

### ROSE MFG. CO.

1731 Arcpahoe St., Denver, Colo.

• SAFETY BELTS • LADDER SHOES

• POLE GRIPS • WALL GRIPS • CHISEL GRIPS

• LIFELINES & LANYARDS

SAFETY PRODUCTS for

INDUSTRY

Safety Goggles

**Welding Helmets** 

Safety Spectacles

**Protective Clothing** 



Write for NEW Catalog .

GLENDALE OPTICAL CO., Inc.

232 Liberty Ave

Brooklyn 7. N. Y.

demand that safety features be outlined and described and then adhered to. They should consider carefully before they rule out a supplier because he includes what others might call excessive safety features. Get copies of this code and make sure the conveyors you want incorporate the codification you feel you need.

Users and manufacturers in working out a conveyor system plant layout should carefully consider the over-all safety aspects of the immediate plant. Has the system hemmed in workers too much, creating fire hazards? Leave normal exit facilities. Watch wall openings and floor openings as to their effect on both sides of walls and ceilings.

#### 4. Safe Operation

Finally, just a few suggestions for safe use of conveyors. When you have bought and installed a conveyor, even though you need it badly, don't start using it for production until it is formally turned over to you by the manufacturer. The systems must be run, the bugs must be taken out of the automatics, clearances between guides and moving parts may need to be relieved. It's hard to design and build a conveyor system that does not need any field adjustment after shipment and the variations in the users' plant are guides and moving parts may most accidents have occurred at this point in our experience as a manufacturer.

If a conveyor is being serviced and is shut down, as it should be, watch that the work is not being done too closely to another moving conveyor. I can think of a number of serious accidents that have occurred where the serviceman, absorbed in this work, leaned back into another moving conveyor or a slowly moving load came along and squeezed or pinched him against the stopped conveyor or a wall opening.

Watch loading of conveyors. Be sure the hookup is secure if it's a hooking job. If materials are piled on the conveyor, watch that they aren't top heavy.

Remember clearances between conveyors and walls. Clearance for a man to walk through should, wherever possible, be based on the largest load carried on the conveyor.

Authorize certain persons to operate certain conveyors just as you would a machine tool. Keep others from starting the systems. Speed variations in conveyor lines should be entrusted to one who understands what effect these changes might have on the system as a whole.

If overload cutouts are continually operating or shear pins continually shear, contact the manufacturer of the equipment and find out the cause of jamming. Check by means of a dynamometer to make sure the system is not overloaded. If the design is light, get it heavied up before trouble starts.

Have a number of push-button stop stations along a conveyor line. Insist on electric ground wires, particularly on portable conveyors and systems operating in the outdoors or in damp conditions. Insist on heavy high-quality electrical equipment. Stay on the high side of electrical codes.

Conveyors can be used safely and their use has contributed substantially to the industrial workers' safety. If you set up definite rules, be sure all are acquainted with them. If you insist on high safety specifications in the conveyors you buy, the systems will be safe.

#### Occupational Vision Conference Nov. 1-2

An occupational vision conference will be conducted November 1 and 2 in Atlantic City by Rutgers University.

The two-day program will emphasize the importance of good vision to high industrial efficiency. Attention will be focused upon the new concepts in lighting, functional color for better human efficiency and safety, occupational vision hazards, occupational eye injuries, relation of visual efficiency to motion and work, and establishing a workable visual program.

Management leaders, personnel directors, safety engineers, industrial nurses and physicians, plant ophthalmologists and optometrists are being invited. While this conference was developed primarily for New Jersey industries, out-of-state concerns may participate.



CORBIN CABINET LOCK Division
The American Hardware Corporation
New Britain, Conn.

# See you October 8 to 12 at



#### BOOTH NO. 4 CONGRESS HOTEL

With our new 1952 line of "BETTER WORK GLOVES FOR EVERY PURPOSE"

ADVANCE GLOVE MANUFACTURING CO.

903 W. LAFAYETTE BLVD. • DETROIT 26, MICH.

#### Calendar Contest Winners for August 1951

First prize in the National Safety Council's Safety Calendar Contest goes this month to R. Cheyne-Stout of Orlando, Fla. The theme in this contest was beat the heat. Mr. Cheyne-Stout's rhyme was adjudged best of all those submitted. It was:

> His weight, pate, and gait laid him low,

Second prize went to J. G. Tomson, Christehurch, N. Z., for this line:

Playing safe keeps your handicap low.

Third prize was awarded to Wilma Patino of Columbus, Ohio for the following:

In both golf and good sense, Tom scores low.

Thirty \$5 awards were issued to: Mrs. Gee Vee Marlow, Spokane,

Mrs. Joe Savely, Black Hawk, S. D. Mrs. Grace K. Cole, Teacher, Finletter School, Philadelphia.

Edgar C. Hastings, Principal, La-fayette Jr. High School, Uniontown,

M. H. Chambers, Ardmore, Pa. Mrs. K. Leckie, Teacher, Portland,

Eilene Harris, Student, Eugene, Ore. Mrs. H. W. Guenther, Tahlequah, Okla.

Mrs. Guy Young, Dexter City, Ohio. M. Belle Hanton, Holtzmann, Wisc., Shepard & Kelly, New York City.

Michael Paul, Brooklyn, N. Y. John Gregory, Clay, N. Y. Mrs. Helen M. Condon, Normandy,

Martha W. Mathews, Mobile, Ala. Harry Krug, Kansas City, Mo. Mrs. Marion Courtenay, Russellville,

Mrs. Jennie V. Snyder, Beachwood. NI

Mrs. Elvenia Dusek, Dardanelle, Ark. Mrs. Charleen A. Babcock, Hydesville, Calif.

Mrs. Ned Fish, Columbia, Mo. Mrs. C. H. Stone, Macon, Ga. Miss Estelle H. Lorquin, Public Stenographer, San Francisco, Calif. Mrs. Helen S. McGinley, Northbrook,

L. A. Hughes, Tupelo, Miss. Eileen Moss, Idaho Falls, Idaho Betty Terrell, Paducah, Ky. Mrs. Lois Pasey, Falmouth, Mass.

A. J. Schoendorf, Editor, House Organ, California Fruit Exchange, Sacramento, Calif. Jim Lynch, Planning Dept., U. S.

Rubber Co., Indianapolis, Ind. H. Pickering, Quarry Foreman, Alpha Portland Cement Co., St. Louis, Mo.

Stranger: "How long has this ghost town been dead?'

Native: "Not long, I guess. You're the first buzzard I've seen."





#### DANGEROUS BOOBY-TRAPS



Pulls Nails

Sets the Band

Set removes dangerous nails and staples; sets the top band so it cannot come off. A hardened tooth pierces the band and locks it to the staves. Increased safety at low cost. Saves time, saves barrels, claims, waste. Years of service. Order yours today. Successfully used by all types of plants.

Williams Barrel Band Safety-

DON E. WILLIAMS CO. 307 - 16th St., Moline, III.



WILLIAMS SAFETY-SET 6.50 f.o.b. Moline, III.



painful injuries. Avoid danger in slippery floors that may mean disabled workers, lost time, costly hospital bills. Use Safe-T-San Non-Slip Floor ON FLOORS Polish, which reduces slipperiness of any flooring material while WITH it beautifies and protects the finish. It's easy to apply. Write SAFE-T-SAN today for sample of Safe-T-San.

HUNTINGTON LABORATORIES, INC.

Huntington, Indiana . Toronto



#### Hope for Handicapped

-From page 99

first year of his two-year work for his Master of Social Work degree. We must hand it to that chap. True, we helped him with tutoring and with readers, but he set an example for people who have two good eyes. He has intestinal fortitude, or whatever you like to call it.

Another case is that of a young chap born near Montreal. He was injured when a Bren gun carrier traveling at high speed broke the side track and he was crushed. He was badly jammed up and lost his sight. After a year or more in hospitals he came to us. He was six feet tall and as blond as a Scandinavian, explaining that his mother was Irish and his father was French. He spoke some English and wanted more education.

We tutored him and in 18 months he had credits for university. He obtained his B.A. degree in three years and today, is a fine, upstanding gentleman. He can

make a much better speech than I can, in either English or French. and is on our staff in the Ouebec Division of the Canadian Institute for the Blind.

These examples indicate courage, fortitude, and willingness to make the effort when the opportunity is presented. These are the prime factors. I have had people come in to me with a little vision. Proper vision is 6 over 60-being able to see 6-inch block type at

102 leather

M8-913 light

60 meters. Some of these people can see 1/4-inch block type at one foot, and they are what we call "industrially blind." That means having enough vision to do certain essential work. Some people have come to me complaining about this borderline vision, and I have said, "I would give devil of a lot for such vision as you have. Instead of complaining, you should be making good use of it."

That may sound rather tough

















# in a HURRY?

- Complete Stocks
- Immediate Delivery
- Lowest Prices

#### Everything You Need, Including-

gloves; aprons; boots; rubber, asbestos and waterproof oiled clothing; eye savers; sleeves; foot guards; respirators; welders' helmets; face shields; acid containers; leggings; finger guards and many other items.

# Dunn Products

1216 WEST MADISON STREET CHICAGO 7. ILLINOIS

# ASK FOR

OF ENTIRE LINE

48 value crammed pages! Complete head to foot protection for industrial workers.

# VISIT BOOTH

#### VISIT OUR BOOTH No. 48 STEVENS HOTEL NATIONAL SAFETY CONGRESS



1933 SERIES - 114" diameter, hard glazed enamel, heavily gold plated pin and safety lock catch, \$9.00 dos. (plus

#### Get Your FREE 32 Page CATALOG

of stock and specially made PLAQUES, TROPHIES, EMBLEMS and PRACTICAL AWARDS

SERVICE - SAFETY - INCENTIVE **AWARDS** and ATHLETIC TROPHIES

CLARENCE WILLIAMS WILLIAMS JEWELRY & MFG. CO. Silversmiths Bidg., 19 S. Wahash Ava Phone CE strai 6-5018 Chicago Chicago 3, IH.

National Safety News, October, 1951

but we want to encourage them to stand on their feet. It is impossible to rehabilitate people who won't. They have to help themselves; then we step in and give them just as much help as they need, but not too much. Some, naturally, need more than others.

In February of this year we had a big rehabilitation conference with representatives of our Federal government — three of the ministers and a number of representatives from the various departments. All ten provinces were represented, as were 16 national health and welfare organizations in Canada. The idea was to outline a comprehensive rehabilitation program, both physical and vocational.

That pattern is laid down now. The Advisory council is in the process of being appointed and we hope to see the day when good Canadians who have been handicapped are put back into that self-respecting position of being able to stand on their own feet. It may take a year, two, or even five years

to get the thing swinging. But, no matter how long it takes, it is worth doing.

I see paraplegics, those who, especially in the war, got spinal injuries and are paralyzed. In the first great war we put them into hospitals to dry rot and they stayed there antil they died. Not so in this war. A clever United States business man on the West Coast suffered a motor accident and became a paraplegic. He invented a light collapsible wheel chair.

That wheel chair has revolutionized the whole care of the paraplegic. Although there are 200 paraplegics who were in the Canadian army none is in a hospital. except for brief visits for "running repairs." They are active. They go from their homes to their cars and slide off the seat of the wheel chair on to the seat of the car. The chair can be folded to take up little space in the car. There are hand controls and a man can get out of the car and go into a hotel. He can go to dinner with friends, to his office, or to the theater. Isn't that better than



#### WHY WAIT FOR AN ACCIDENT?

Write today for descriptive literature or a trial pair of Sankey's Knee-Shin or Shin Guards constructed of light weight, durable, strong fibre with soft sponge rubber padding.

ELLWOOD SAFETY APPLIANCE COMPANY
219 SIXTH STREET ELLWOOD CITY, PENNA.



#### How Safe Are YOUR Employees?

Here is Industrial Safety at a Big Saving in Time and Money. Just the way they like it with Color, Humor and Interesting Pictures that impress.

A continuous "safety reminder" that keeps employees alert to safety.

Write for samples and prices.

FRANK O. SHOEMAKER, Publisher 3641 S. IRON ST., CHICAGO 9, ILL.

Sell Safety to Your Employees by Publicity
— It Works

vegetating in one room for the rest of a shortened life?

We who have lost our sight are very keen on the prevention of accidents and illnesses that might cause blindness. While we make the best of the road ahead, we are not recommending that anyone travel it unnecessarily. You would find it tough and some of you might not be equal to it.

Early in the war I had a call from a plant in Toronto. The safety engineer was worried. The plant had mushroomed on war production. Inexperienced help came in large numbers, all with the best intentions but too little acquainted with the rules of the game. Management became disturbed over the number of accidents and found many of these traceable to not wearing goggles or face masks. So they asked me to come out.

"Why?" I asked. "What is the procedure?"

"We tell the men to go over there to that bin and pick out a pair of goggles," the foreman answered.

"How do you purchase the goggles?" I asked.

"By the gross—maybe 10 gross

"That's fine," I said. "Have you we'r seen anything that varies so much as the eyes and the shape of people's faces? How many people do you think can fit them-

selves comfortably from a bin of stock goggles? Fifty per cent, perhaps.

"If you will go into the matter carefully, I think you will find that men are not wearing their goggles because they cannot find a pair that fits comfortably and it takes time to adjust them."

It is not sufficient to censure employees for not wearing goggles. What happens in your plant when a man is hired and he is wearing glasses for some eye defect? Does he wear goggles over

FOR CLEAR Projection OF

NATIONAL SAFETY COUNCIL



his glasses? What happens to his efficiency if he doesn't wear his glasses? You should be interested in the economics of the deal and in efficient, satisfactory work.

In my experience, I have found that if an individual is anxious enough to do something and has the spirit and courage, he will find a way. There are many people who have the spirit fundamentally. In others it must be inspired.

There are some whom you will never be able to awaken out of their lethargy. Don't let it discourage you. I have seen people that at first sight I would write off as hopeless liabilities, physically, but I have found in them a spirit that refused to be beaten. I have seen others with the best prospects of success, yet they have failed.

I am going to conclude by quoting from William Ernest Henley's poem, *Invictus*, written in his blindness:

Out of the night that covers me, Black as the pit from pole to pole, I thank whatever gods may be For my unconquerable soul.

State

SHIPPING DEPOT: HUNTINGTON, INDIANA

#### Army Film on Safety Wins National Award

For developing the film, "Once Too Often," the National Committee on Films for Safety has awarded the Army a special citation.

The award was presented recently by John H. Magill of Automotive Safety Foundation on behalf of the National Committee on Films for Safety, to Lieut. General Anthony C. McAuliffe, Army Assistant Chief of Staff, G-I, Personnel. After accepting the award for the Army, General McAuliffe presented it to Major General George I. Back, Chief Signal Officer of the Army, whose staff produced the film.

Citation accompanying the award reads: "National Committee on Films for Safety Award presented to the United States Army for the motion picture, 'Once Too Often' accorded highest honors in the general safety field for non-theatrical films produced or released in 1950."



FOAM-X COMPANY . 334-B WEST ALAMAR . SANTA BARBARA, CALIFORNIA

# NO SAFER PROTECTION FOR PUNCH PRESS FEEDING

OSBORN Safety
Pliers can't shatter
if accidently caught in
closing press dies . . .
can't send a blinding
splinter into an operator's
eyes . . . can't damage
your press dies!



They're made of Osmolloy, the amazing lightweight Aluminum alloy that flattens under impact—instead of shattering. Suggestions for virtually any individual application are yours for the asking . . . ask for Bulletin No. 8-51 for the standard designs. THE OSBORN MANUFACTURING CO., Argonne Road, Warsaw, Indiana.

# SBORN SAFETY PLIERS

City.....

How many use showers.....



"One of the surest ways to <u>make</u> money is to <u>save</u> money..."

#### CAPTAIN EDDIE RICKENBACKER

President and General Manager Eastern Air Lines, Inc.

"... and the purchase of U. S. Savings Bonds through the Payroll Savings Plan is an easy way to save. It is good for the community. It is good for you because it means money available for a rainy day. Through the thousands of years that men have roamed the globe there have always been rainy days."

A vigorous exponent of thrift, Captain Eddie Rickenbacker made the Payroll Savings Plan available to his employees of Eastern Air Lines some years ago. From time to time, in personally dictated letters addressed "To All Members of Eastern Air Lines Family", he points out the individual and national advantages of the Payroll Savings Plan, and urges members of Eastern Air Lines Family "... to sign up on the Automatic Payroll Savings Plan. In years to come I am sure you will be mighty glad you did."

How about your Payroll Savings Plan? What have you done since Savings Bonds became Defense Bonds? What is your percentage of employee participation?

From coast to coast, companies large and small are installing the Payroll Savings Plan or revitalizing their present plans through person-to-person canvasses which put a Payroll Savings Application Blank in the hands of every employee.

Note the results of some recent person-to-person canvasses. Think what management efforts like this mean to the Defense effort. Then phone, wire or write to Savings Bond Division. U. S. Treasury Department, Suite 700 Washington Building, Washington, D. C. Your State Director will be glad to help you put in a Payroll Plan or show you how to conduct a person-to-person canvass.

## Results of recent person-to-person canvasses to increase participation in Payroll Savings

39 companies total employees	487,347
Employees on plan before canvass Employees on plan after canvass	
% of participation before canvass % of participation after canvass	

\*Includes 62,870 employees of six componies which did not have plan before canvass.

The U.S. Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and

#### NATIONAL SAFETY COUNCIL



# SAFETY

# POSTERS

# 

#### IMPORTANT

ALL miniatures shown on these pages are of NEW posters — produced for the first time this month. Excepting the Jumbo poster (below, left) all will be available during the remainder of 1951. Those displayed on the following pages in

black and white are actually printed in two or more colors. We suggest you refer to this copy of the News in making monthly selections.

In addition to these new posters, you will find a great variety of subjects among the 744 posters illustrated in the 1951 Directory of Occupational Posters, and which will also be in stock throughout 1951. For a proven plan of selecting your posters objectively, refer to pages 4 and 5 in the Directory—a copy of which has been sent to all National Safety Council members. Additional copies are available at 50 cents each—write Membership Dept., N.S.C.



9429-C

25×38

Above new "C" poster, issued monthly, is indicative of the other two color posters—shown in black and white on the following pages and in the 1951 Poster Directory.



The Jumbo poster, issued monthly, is designed for outdoor use and is available to members on annual subscription but is not stocked. Its actual size is  $9 \cdot 11^{\circ} \cdot 9 \cdot 11^{\circ} \cdot 8^{\circ}$ .



This new four color poster is illustrative of the 72 four color posters shown in the 1951 Poster Directory.

Electrotypes of poster miniatures on this page are not available, nor can payroll inserts be supplied.

#### Posters below are printed in two or more colors

(Available only in sizes indicated)



9287-B

17x23



MATIONAL BAPETY

81/x111/2

9226-A

TEN LITTLE OFFICE WORKERS - ALAS:

9385-A

-81/2×111/2



9326-B 17×23



81/2×111/2



9397-A 81/2×111/2



9421-A



Electrotypes or payroll inserts can be furnished on all poster illustrations shown above.

# Posters below are printed in two or more colors (Available only in sizes indicated)



NATIONAL SAPETY COUNCIL

9407-B

17x23



9366-A

81/2×111/2



CLEAR and

KEEP BOTH HANDS

MATIONAL BAPETY COUN

9420-A 8½x11½



9377-A 81/2×11/2

OUT OUR WAY

THE PROPERTY OF T

YOU MEVER HAVE TO "COVER UP" FOR GOOD NOUSEKEEPING

9425-A 8½x11½



MATIONAL BAFE

9416-A

8½x11½



V-9414-B

17×23



MATIONAL SAFETY COUNT

T-9363-B

17x23



V-9412-B

17×23

Electrotypes or payroll inserts can be furnished on all poster illustrations shown above.

#### You and the Newspapers

-From page 103

George Morton, for forty years a crane operator of Extra Steel Mills, who has poured more than a million tons of steel without an accident, receives a citation with medal from National Safety Council.

Sometimes an industrial or commercial unit is fortunate in having a personality who catches the public imagination and who becomes a central dramatizing agent of an event because he is well and favorably known. Such a person is a gold mine for a publicity writer.

Perhaps the industrial unit observes some colorful custom, such as an annual picnic, or a birthday or a Christmas party. If not, perhaps such an occasion can be promoted. Perhaps the community celebrates an event like a cherry blossom festival or a harvest moon festival, or perhaps, an anniversary with a public parade. A public relations director can take advantage of such events to secure good publicity. Certainly dis-

criminating use must be made of such vehicles but there is always need for discretion in drama.

Next to good copy comes good distribution. A publicity campaign that fails to reach the people it is designed to influence is wasted— obviously. The publicity man must answer these questions:

When shall I release my publicity?

How and where shall I release it?

If there is a newspaper story

how many of the people I am trying to reach will read the newspaper?

If there is both a conservative and a sensational type newspaper in the community should I use one or both papers?

If there is a Sunday paper should I try to get it with pictures in the rotogravure section at a strategic time?

If there is a morning and an evening paper should I shoot for one or both?



# **JOMAC GLOVES**

outlast 9 pairs of "monkey face" gloves in die-casting plant

A die-casting plant\* had been using up "monkey face" gloves at the rate of three pairs per man per day. They switched to Jomac Work Gloves and found Jomacs lasted three days, nine times as long as the old-style gloves.

JOMACS ARE

Washable • Reversible • Flexible • Heat-resistant Protect against heat, cold, rough and sharp edges

C. WALKER JONES CO.

6135 N. LAMBERT STREET . PHILADELPHIA 38, PA.

Finest Floor Mat Made



#### CUSHIONED MAT

Rubber Feet Give
Positive Insulating Protection
From Electrical Shock



Straight Oak Slats Mounted on Rubber

DEALERS IN
MOST MAJOR CITIES
OR WRITE DIRECT

#### SOUTHERN

MANUFACTURING COMPANY
1814 Designed St. Monroe, Le

If foreign language newspapers are read in my community should I try for publicity in them?

Monday morning is usually a good time to release handouts. Unless something special in the news breaks there is more space for publicity in a newspaper on Monday than on other days.

Consider national holidays and the nation's penchant for automobile travel. The National Safety Council forecasts the probable number of deaths and injuries from automobile accidents and other causes and press associations send out the story. The local editor gets the press association story and he uses it—frequently on the front page. Often he writes an editorial on these holiday tragedies. A little foresight may enable the publicity writer to prepare a story embracing local features which the editor can fit neatly into his plans to supplement the press association release.

Awards, scrolls, plaques, flags

and medals for accomplishment in accident prevention, the presentation of citations and pins to drivers of trucks and to workers in the shops for five, ten, or more years of operation without a disabling injury; meetings of 25 year clubs and initiations of workers into them, these and other common activities are all sources for publicity which can be arrayed as dramatically or appealingly as the photographer's art and the writer's capacity allows.

Many dailies carry weekly summaries of automobile accidents, usually releases from State Motor Vehicle Departments. Interesting local sidelights slanted to serve the publicity writer's purpose may appeal to the local editor. The writer knows, or should know, from his familiarity with the newspaper, what must be written and how it should be written to fit in easily with the press association story or the departmental release he desires to supplement.

News stories of fires, explosions, train wrecks, and other catastrophes which happen nearby have

#### Are You Fully Protecting the Feet of Your Employees?



# "SANKEY" IMPROVED FOOT GUARD equipped with Anti Skid TOE CLIP.

"SANKEY" FOOT GUARDS consist essentially of a metal shield to be worn over the shoe whenever the foot is in danger of being either crushed or cut. The metal shield is designed to furnish a maximum amount of protection to the entire front of the foot—not merely the toes alone, but also to the instep against hazards from falling, rolling or flying objects, or from accidental tool blows. Write for literature or a trial pair.

# ELLWOOD SAFETY APPLIANCE COMPANY 219 SIXTH STREET ELLWOOD CITY, PENNA.



Combination Foot-Shin Guard



Foot Guard Equipped With Anti-Skid Full Sale



Fibro-Shin and Shin-Knee Quard

FOR YOUR INDUSTRIAL RUBBER NEEDS SEE

## Miller Products Co.

"Industrial Rubber Headquarters"

Write or telephone today for information and prices on our complete line of super quality Industrial Rubber Products at low prices. Immediate delivery from our New York City warehouse of the following:

- APRONS
- BUCKETS
- GLOVES
- FUNNELS
- CLOTHING • FOOTWEAR
- TUBING
   DIPPING BASKETS

Send for your FREE copy of our new, fully illustrated catalogue NOW!

If You Buy Industrial Rubber Products It Will Pay You To Get Acquainted With

#### Miller Products Company, Inc.



33NS Warren St. New York 7, N. Y. COrtland 7-5335

special home interest. Such stories are covered by regular news reporters but they provide opportunities for interesting sidelights that may fit the publicity writer's wants and which appeal to the editor. Only an expert can distinguish many such handouts from actual news stories.

Items concerning employees who participate in the accident prevention campaign may be sent to the local news editor for inclusion in the news column that carries personal items of the locality. It may be suburban or the news coverage of a nearby village or town:

Carlo Nundani, chairman of the shop salety committee at Extra Steel's Rolling Mill, will be the breakfast speaker at the Holy Name Progressive Club meeting at the Highland Hotel tomorrow morning.

Such an items might go well in a foreign language newspaper too.

Some hints as to what the editor likes to find in handouts are given in the following paragraphs. They apply generally to all written publicity.

# Oakite's New FREE Booklet



tells how to strip large areas with or without steam; strip metal parts in large volume; prepare stripped surfaces for repainting; remove oil-base paints, synthetic enamels, plastics, resin-base paints, japans, wrinkle finishes, alkyds, phenolics, ureas, etc.

FREE copy sent on request. Write Oakite Products, Inc., 14D Thames St., New York 6, N. Y.

SPECIALIZED INDUSTRIAL CLEANING MATERIALS . METHODS . SERVICE Technical Service Representatives Located in Principal Cities of United States and Canada

- 1. Make the story as short as possible consistent with what it is desired to publicize.
- 2. Summarize the story in the lead paragraph or paragraphs. Tell when, where, who, how, and why.
- 3. The story must follow up and explain the feature, otherwise it advertises something it does not deliver.
- 4. It must be written so that the editor can cut it almost anywhere and still leave a story that seems complete. This requires paragraph unity in which each paragraph deals completely with some phase of the story.
- 5. Comment and opinion have no place in such publicity.
- 6. Diction must be clear and swift. This is accomplished by a style that uses short, simple sentences simple sentences especially. A four word sentence can be abstruse.
- 7. Avoid what George Bernard Shaw used to call "springtime adjectives" that becloud with the "fumes of understanding." Never begin a sentence with explanatory matter.
- 8. Paragraphs should be short and compact with the emphasis in the beginning to present the content in the



instantaneous gas shut-off under any or all unsafe conditions

eur SERIES "LT

Don't be satisfied with "oneway" safety on your gas-fired installations. Be safe ALL ways.

Only the LOCK-TITE Safety Valve offers positive shut-off in case of electric, gas or air failure, or any two of theseby the use of interchangeable power units.

Only the LOCK-TITE gives you all of these safety advantages: manual re-setting; most positive soft-seat seal (75 PSI seating pressure); exclusive through-shaft construction; valve body properly designed for minimum pressure drop; better materials for longer wear; easiest to mount. Completely fulfills all the latest safety requirements.

Representatives in All Principal Cities

Eclipse Fuel Engineering Company

#### SEND THIS COUPON FOR DESCRIPTIVE BULLETIN

Eclipse Fuel Engineering Co.	NAME	TITLE
Dept. NS, 711 S. Main St. Rockford, Illinois	FIRM	
Please send me, FREE Bul-	ADDRESS	
letin M-302 on LOCK-TITE Safety Valve.	CITY	STATE

shortest possible time. There should not be a surplus word in the whole story.

9. To avoid wordiness use concrete rather than general words. Don't say a large number of people" say "a thousand" or whatever the number may Whenever a broad general word is found change it to a word with definite meaning. Change vagueness to meaningful writing.

10. Question the use of passive verbs and substitute active verbs to liven up the copy. Trite words are taboo. A little slang may be allowed -but very little.

11. Never talk down-give the copy dignity. Coarse expressions are seldom justified in any writing- never in publicity copy.

12. Boiling down the first draft or two will usually improve the story. This is often better than to take out whole

13. Double space all copy and leave ample head space as well as a liberal margin on each side. A six inch line (60 typewriter spaces) on an 81/2 x 11 sheet is about right and such a line provides about two lines of newspaper

14. Identify the story on each page and, of course, number pages. But do not have more than two-three at the outside. Long handouts have a habit of finding the wastebasket.

15. Do your own clipping. Don't ask the editor to send clippings. He gave space; be grateful for that.

16. Crisp, new ideas are liked by editors and what they are can best be gleaned from studying the type of articles published in the medium you wish to use.

17. Finally, it is suggested that the novice get a copy of the newspaper's style sheet. Studying it will help to develop habits of accuracy.

Other media for publicity may range from a single bulletin board serviced with typed information and newspaper clippings of the other fellow's publicity, through booklets, pamphlets, monographs. envelope stuffers; exhibits of charts, graphs and diagrams; photographs, drawings and posters; house organs, motion pictures, sound and silent film, public speeches, radio talks, localized and general meetings and many other media, all of which require more or less writing.





#### Used by Over 70% of the Largest Industries in the United States

No splash . No mess . No waste . Odorless Easy to maintain . Nothing to get out of order Men like Onox . It relieves tired, aching feet

Modern research has upset the old theories about Athlete's Foot control. Skin specialists now say that the best chance of preventing Athlete's Foot is to improve the condition of the skin. That's what Onox does. Onox mineral salts toughen the skin and make it resistant to fungus growth. No fungus growth-no Athlete's Foot.

#### 60 DAY TRIAL OFFER

We will ship prepaid your trial order for any amount of Onox and footmats. You pay nothing unless fully satisfied after 60 days' use.

#### ONOX, INC.

DEPT. D. 121 SECOND STREET SAN FRANCISCO S, CALIFORNIA

WAREHOUSES: BROOKLYN, CLEVELAND, NEW ORLEANS, LOS ANGELES





Especially written for safety inspectors and maintenance supervisors directly responsible for the safety of press operators. Power Press Protection" is yours for the sking. Contains valuable information on the maintenance and safe operation of power presses. Send for your copy today.



#### JUNKIN SAFETY APPLIANCE CO.

930\_W. HIII St. LOUISVILLE 8, KENTUCKY

#### Before the Blueprints

-From page 114

dents being well known. Special treads were used, which are designed so as not to lose their non-slip characteristics as they wear. Standard 42-inch handrails and standard toe boards are a part of all stairs and elevated walkways. Ladders, installed only where stairs were impractical, are constructed with flat non-slip treads instead of round rungs in accordance with the Lever Safety Standard on the subject.

Each specific unit in the plant has its own special safety features. For example, where propane is handled, grounding systems to carry off static electricity from tank trucks are provided for use when unloading. The tightness of the propane system is safeguarded by a flammable vapor detector which operates continuously and sounds an alarm if flammable vapor is present before a dangerous concentration is reached. Where caustics or acids are han-

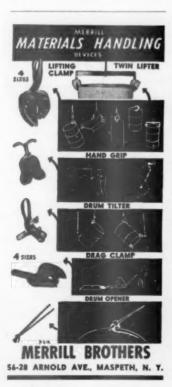
dled, safety showers and eyewashing stations are installed for immediate first-aid in case of contact with chemicals.

The old adage, "a clean plant is a safe plant," has been recognized and numerous conveniences have been installed to aid housekeeping. Areas where dust may accumulate are equipped with vacuum cleaning systems. The color system has been designed to create an atmosphere of cleanliness throughout the plant and to aid in maintaining high levels of illumination.

To help maintain the health of employees, a well-equipped and staffed medical service is provided. The quarters comprise reception room, nurses' office, first-aid room, doctor's office, two examination rooms, two rest or treatment rooms, and a small laboratory. Medical procedure calls for close cooperation with private practitioners, community facilities, and the State Workmen's Compensation Board. The program emphasizes the preventive side of medicine.

In addition to the health clinic, other facilities have been provided for employees. Rest and locker rooms with modern equipment and eye-appealing color schemes have been installed throughout the plant.

A large air-conditioned cafeteria is located on the fourth floor of the office building. It has a seating capacity of 260 persons, who may enjoy a view of the distant San





sold World-Wide

#### "Jumbo" Goggles You Can Put On or Take Off With One Hand



Yes, the Sellstrom No. 610 Welding, the 611 welding and grinding and the 612 clear plastic, wide vision goggles for general shop work are making eye protection history. Because of the extremely light weight, the perfect fit the unusual comfort and the easy one-hand handling, workmen willingly wear these goggles, even though they may object to the use of the old style cumbersome goggles. They increase eye protection because they are worn more regularly.

They offer you everything desirable: Fit over prescription glasses, frame is one-piece construction with a special patented adjustment feature, perfectly balanced. One of these three styles is suitable for every goggle need. To prove these facts for yourself, and for "on the job" test purposes, let us mail you one pair each of the three styles, fitted with any type lens you desire. We will also give you the name of a near-by dealer who will take care of your regular requirements.

#### A Pleasant Surprise Awaits You at the Chicago Safety Show

When attending the Chicago Safety Show at the Stevens Hotel, October 8 to 12, be sure to see us at Booth 30.

We recently developed several new products which will be on display, ready for your inspection. All of them are made of the toughest obtainable material, streamlined for full eye and face protection, extremely light weight to satisfy the present demand, and provide the greatest possible wearing comfort.

# sellstrom

MANUFACTURING COMPANY
Sellstrom Saleguards Your Eyes and Face

Selfstrom Safeguards Your Eyes and Face
622 N. Aberdeen St., Chicago 22, III.

Gabriel range and foothills while eating. Meals are served from menus prepared with nutritional guidance by the plant medical director,

In design, function and color, the plant is typically Californian. The climate permits much of the processing equipment to be located out of doors with only storm shelters over the operating levels. Special attention has been given to the control of smoke and odors.

Buildings and installations at present occupy only one-third of the 30-acre tract, the remainder of which has been attractively landscaped. All buildings are of reinforced concrete and steel.

Built-in safety is not regarded, as the final solution for the prevention of personal injuries. But the company believes that given a safe plant and support of top management, employees will be encouraged to put forth the necessary extra effort to prevent accidents.

EFFICIENCY!
HAAS
MAGNIFIER

Perfect for eye, throat, and skin examinations, cleaning or dressing wounds. Wonderful for reading X-Ray plates and other exacting lab. work where good vision is a necessity. Large field is illuminated with built-in fluorescent lights. No heat, no glare, no discomfort to patient. Adjusts instantly to any position.

You'll be amazed at how much better you work when you can really see. Write for information,

HAAS CORP. 23 MAIN ST. MENDON, MICH.



EAR- VALV

Eliminates harmful effects of loud noises . . . lets you hear sounds at voice level.

Loud noises in factories and plants cost Industry huge sums in workers' lost time, slowed production, accidents, lowered morale and impaired hearing.

Protect your workers' ears against loud noises . . . by using the

#### Lee SONIC EAR VALV

A sensitive valve closes for an instant to soften loud noises . . . reopens instantly to permit the hearing of sounds at voice level, such as conversation, signals, warnings, machine irregularities—normal sounds. Operates on principle similar to the human ear's own protective mechanism.

# Hearing is vital ...Safeguard it!

#### Not an ear plug

Unlike ear plugs, these tiny Sonic Ear Valvs, composed of 20 small precision components, cut out only the harmful, shattering sounds . . . protect the delicate sense of hearing, guard against noise fatigue, headaches and slow-downs due to noise. Thousands of LEE Sonic Ear Valvs are in use in Industry. Join these progressive concerns in providing money-saving, morale-building modern ear protection. For additional information, prices and industrial discounts, write

#### **SIGMA Engineering Company**

1491-N North Vine Street Los Angeles 28, California

Representative inquiries invited

#### PANEL: What's Wrong with Small Business?

(From page 105)

to him, the cost to his economy, the cost to the employee.

The small plant manager must be made to comprehend:

- 1. The cost of interrupted production due to an accident.
- The cost of replacing an employee.The problem of breaking in a new employee.
  - 4. Lower efficiency.
- 5. Delayed deliveries.
- 6. Cancelled orders.
- 7. Loss of customer good will.
- 8. Lower morale.

Once a small business manager realizes these problems and many more, and understands the implications, he should be ready to do something about them.

The work that can be done through trade associations, to which all small businesses belong, should be of considerable help in solving the problems.

Some small businesses have encouraged visiting nursing associations to come in to a group of plants to assist in a good first-aid and health program. This is of tremendous help to small business and should be encouraged.

The small business manager must be made to realize the magnitude of his accident prevention problems. He must first of all be sold on the idea that he wants to make his operation safe. He must want to do it.

#### MR. KEEFER:



Here are a few reasons why small firms are not doing a better accident prevention job:

- 1. Small firms cannot afford full-time safety engineers.
- All too frequently responsibility for safety is not given to anyone, even as a part-time job.
- 3. If responsibility for safety is assigned to someone, that person may

have insufficient authority to secure re-

- 4. If responsibility is retained by the president of the firm or assigned to some other top-ranking executive, that person may already be overloaded with other duties.
- 5. The average small firm does not maintain a running record of accidents, accident rates, or accident costs.
- 6. Even a very high accident rate will produce accidents so infrequently in a small group that its executives are not likely to be impressed with the seriousness of the problem.

 Small firms rarely join such organizations as the National Safety Council, and their representatives attend safety meetings infrequently.

8. Small firm executives usually are reluctant to make expenditures from which they do not see definite and prompt returns.

9. The number of small firms is so great that the job of carrying the "gospel of safety" to them is practically beyond the capacity of the promotion method of attack that, under the leadership of the National Safety Council, has proved so effective with large concerns.

On the whole, these factors probably can be summarized best in this statement: The chief executive does not devote to the accident problem the relatively small







amount of time and money required to secure the desired result.

Mr. MURRAY:

Reduction in the annual industrial injury toll must be accomplished through improved safety performance in the large number of small firms and businesses which, together, account for the great bulk of American workmen.

To date no completely satisfactory answer has been found as to why the methods that have produced improvement in the safety performance of large firms have not been successful with small firms.

Our state factory inspectors, who have direct contact with top management in small companies, agree that this lack of improvement resolves in three major factors:

- Lack of detailed cost-accounting; therefore, the cost of their accidents is not brought to light.
- The accident rate has to be extraordinarily bad in a small working force to yield a flow of injuries sufficient to arouse management.
- Accident prevention services require additional work for a small plant executive, already overloaded with problems of sales, finance and production.

As the state of Rhode Island has a great number of firms employing less than 100 workers, we have conducted a study to determine why small business does not readily accept accident prevention service. The result of our study would indicate that the number of small firms is so great as to make the job of carrying "gospel of safety" to them far beyond the capacity of our promotional methods. We realize that we must continue and expand our promotional effort to the small plant but that some supplemental means must be applied to provide a close personal safety contact with each of such establishments operating in our state.

The study further indicated we could not depend on the manager of the small plant to take over the responsibilities for a safety program. We did find, however, a tendency on the part of some managers to consider our recommendation to select on a part-time basis



# ACME...the only Gas Mask with the "PICTURE WINDOWS"

You never have that "jammed-in" feeling, wearing the Acme Full-Vision Gas Mask. Its patented, larger lenses are like picture windows, giving you full natural vision for that safe, unconfined feeling. When you walk, you can actually see your toes without bobbing your head. This factor clone makes Acme outstanding among gas masks . . . well worth looking into.

Write for the complete story on Acme Gas Masks for all occupational hazards.

ACME PROTECTION
EQUIPMENT COMPANY
3037 West Loke Street, Chicago 12, IIIlimais

#### EMERGENCY!

Emergency Splints are on the job.



ANGULAR SPLINT
for upper arm, forearm, elbow, foot, ankle,
lower leg.



KNEE SPLINT with ANGULAR SPLINT for entire leg below the hip joint. Knee splint may also be used alone.

Made of tough water-resistant fiberboard, these SPLINTS are lightweight and inexpensive . fold compactly for storage and transportation . . are sturdy and simple to use

Write for prices and free descriptive folders on splints shown above and Hand Splint and folding Body Splint.

INTERNATIONAL SURGICAL SPLINTS CORP.
395 Broadway New York 13, N. Y

a person from their organizations to be given the responsibility for administration of safety work.

However, no paper plan will prevent accidents unless action is taken by managers to assign the personnel to safety duties. It would require promotion on a national scale, probably under the sponsorship of the National Safety Council, supplemented by all organizations interested in industrial safety.

In Rhode Island we have at least made a start to carry out the above plan. In 1950 an act was passed providing for the administration of first aid and/or other medical services in places of employment. The act requires that all persons operating a factory, shop, or mercantile establishment where 25 to 399 persons are employed shall designate and employ one or more persons qualified as first aid workers. The act states that the first aid worker may be regularly employed at other duties in the factory. A registered nurse is required if the number of workers exceed 399.

This act took effect on July 1, 1951, after giving industry one year to select and train personnel in a standard first aid course. We arranged with the American Red Cross to take over this training. Approximately 2,700 persons have already completed the course and classes are being continued.

The passage of this law gave us a splendid opportunity to experiment. Here was the method of selecting personnel on a part-time basis made to order. We immediately arranged with the Red Cross that a two-hour course on industrial accident prevention be made a part of the first aid training course. This course is being given by our factory inspectors and insurance company engineers. The intent is to interest the first aiders in prevention with the idea of taking over both first aid and prevention work within the plant.

As a further step, all graduates from the standard first aid and industrial accident prevention course will be given a further opportunity to expand their knowledge. We have arranged with the University of Rhode Island extension service to contact all graduates and to try to interest them in a 30-hour eve-

ning course in industrial accident prevention.

This plan is still in the experimental state. However, we feel at least we have started something concrete.

#### COL. STRATTON:

Replies developed from field contacts with small business establishments may give an insight into the mental gymnastics of the



small plant manager and his excuses for not responding readily to any approach concerning a regular accident prevention program. These replies are:

 Since we are a small industry, it does not pay us to give any individual time to learn anything about a safety program.

 Accident prevention should start in the schools and safety training should not wait until people become employed.

3. Our plant is safe enough; "It can't happen here."

4. We have never had a major accident. Why worry about it.

5. My employees are too dumb to assimilate safety material.

6. It is too expensive.

Our plant is not the type that has many accidents.

 We cannot see how information for preventing accidents is of any value since the machines are supposed to be 100 per cent safe.

9. My employees work on their own, it is their responsibility not to get hurt.
10. I provide all the necessary guards and safety equipment, isn't that enough?

Two conclusions develop from such statements. First, it definitely indicates small plants feel that safety is someone else's responsibility; and second, as long as it costs something, it just can't be done. Somethines this latter attitude even prevents the use of "free" safety material.

"What can be done about it?" I wish I knew. It almost appears as if the small business establishment must feel first the effect on his pocketbook. Any altruistic or humane approach seems not worth the time spent. It appears to me that the safety record of the small business or plants will not become good until some way is established whereby the small operator will appreciate that safety is a part of his production program and that









You can give your men the "best" in eye protection without paying premium prices by getting Eyegard goggles. There's extra comfort in them because the super-light plastic is molded to form-fit the face . . . greater protection because the goggles are impact resisting . . extra ventilation through three large vents at side of cup and seven additional vents around the lenses. Cool and fog-free. With all these superior features, they cost no more than ordinary goggles. Next time you order, get Eyegard goggles, and save the difference! Write for free catalog.



No. 31 Grinders and Chippers Goggles

No. 335 Welders Coverspec Goggles

AMERICAN INDUSTRIAL SAFETY EQUIPMENT COMPANY
3501 LAKESIDE AVENUE
CLEVELAND 14, OHIO

his failure to provide safe operating conditions, to provide proper safety equipment, to provide the needed supervision and education may be the items which will place his business in the loss column.

The situation is unfortunate, because an injury causes just as much pain and inconvenience to the employee in a small plant as if he were doing the same job in a large establishment.

MR. NELSON:

If one reason were to be given it might be stated broadly that some top managements in small business have never been sold on safety.



As a result we occasionally receive statements that to provide guards or other safety essentials cost too much. Or perhaps an employer in an all-wise attitude will make the statement that his judgment is better than that of the enforcing authority.

And on other occasions we have been told, usually erroneously, that so-and-so has not been required to do this, so why should he.

Of course, we make sure that the required protection or its equivalent is provided. However, it is our firm belief that it is much better to sell safety to such employers and prove to them the fallacy of their thinking. We find that if the head of the industry is thoroughly convinced of the logic of accident prevention, a great share of the problem is solved.

When this is done it opens the way to plant safety programs, including properly authorized safety supervision and also plant safety committees with which we are in frequent contact.

To illustrate the results of such procedure, may I quote a portion of a letter received from one employer:

The Industrial Commission led the way years ago, you might say forcing industry to respond to the requirements of good thinking and as a result of the work that has been done through the cooperative work of the Industrial Commission and the industry, I think a book could be written about Wisconsin on this subject alone."

MR. VAUGHAN:

Most small business owners have never been sold on the direct and indirect returns from an active interest in safe operations.



When first meeting this type of individual, we learn that he always has what seems to him a good reason for not being interested. The answers sound different, but they all stem from lack of interest.

One man says that he has paid for his insurance and, therefore, he is protected and should not have to do anything further. Another tells us that accidents just happen and nothing can be done to prevent them. We are told that the unions won't let management do anything concerning accident prevention.

The owner says that his employees are so dumb that he can't teach them safety. An often-used story is that he can't even remember a serious accident occurring in his business, so why should he be concerned about preventing accidents when they never have experienced any?

We have to fortify ourselves so that we can talk down these arguments and convince the small businessmen that they should be concerned, they can reap benefits from accident prevention effort, accidents can be prevented.

Unions do not want to see their members injured or maimed, the average employee is interested in working safely if he is properly directed, and a little memory jogging will usually recall an accident and injury in the owner's particular business.

As an example, I recall a small businessman whom I endeavored to sell on safety through telling him about the indirect losses for which he was paying. His answer to me was that while he knew it was costing him something, he was not complaining about the cost and, therefore, why should I worry about it? It took continual selling effort, with more than one call,



THE NEW
AND IMPROVED
POSSONS
POSITIVE

assures

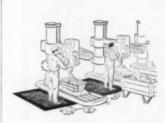
DEVICE

Positive Safety Fast Production Smooth Operation

A type for every kind of press. Meets all safety requirements. More than 25,000 in use! Write today for catalog and names of users near you.

#### THE POSITIVE SAFETY MFG. CO.

4403 Perkins Avenue, Cleveland 3, Ohio





## A SURE STEP IS A SAFE STEP

DURABLE Safety-Tread mats make every step a sure step—prevent slipping and sliding—cut accidents to a minimum.

DURABLE Safety-Tread mats save you big money because they're safe. They help lower compensation costs and reduce lost manhours by cutting slip and fall accidents.

DURABLE has the right easy-toclean mat for your requirements for entrances, lobbies, and the toughest plant installation.

Ask MATTY for the facts.



75 N. Pleasant St. Norwalk, Ohio 2926 Sixteenth St., S.W. Seattle 4, Wash.



Dear Matty:-

Please tell us how DU-RABLE Mats can help improve our safety record.

NSN



Using VEREX Industrial Protective Cream and the recommended technique of application, NO SINGLE NEW CASE OF CONTACT DERMATITIS occurred in a large Airplane Engine Plant among 1500 workers using the product for over six months. The workers included the following occupational groups:

Borers Broachers Burr Bench Operators Crib Attendants Foundry Workers Grinders Inspectors Janiters Lethe Workers Machine Cleaners Machine Repairmen Millers Millwrights Oil Reclamation Worke

Parts Washers
Platers
Plumbers
Power Drillers
Pipe Fitters
Screw Machine Operators
Sheet Metal Workers

Literature or samples on request. Write to: Dept. S.

#### HYGIENE RESEARCH INC.

684 Broadway

New York 12, N. Y.

Algonquin 4-0361-

# NOW

A companion to the

#### **Safety Toe**

The Maselter

#### Safety Heel

A revelation in comfort and Safety. Indorsed by safety engineers everywhere. Request your supplier to equip your Safety shoes with the Maselter Safety Heel Now!

## **Safety Heel Corporation**

25 E. Jackson Blvd. Chicago 4, III.



plus a lucky accident during one of these calls, to sell this man on safety.

The incident was that one of his drivers carelessly smashed the rear fender of his brand new car with a truck while I was trying to sell the man on safety education among his workers. This accident did more selling than I could ever have accomplished. Once sold, he took the necessary action and remarkable results were obtained.

We must do everything possible to sell these individuals on the importance and value of accident prevention.

Once a small business owner is sold, he can easily control accidents for he has his fingers on everything in his small organization. Through his leadership, he can quickly convert a hazardous operation into a safe operation.

He must, however, take the lead, and we must sell him on assuming this responsibility.

#### MR. WHALEN:

The basic reason, in my opinion, usually is economic. Small plants usually operate with an absolute minimum of employees, in



plant, office and supervisory staff. Expeditures for safety, not obviously contributing to increased production, are felt to be burdensome, while safer methods which tend to slow down essentially hazardous operations are felt to be unreasonable.

The small business field is highly competitive and corners must be cut somewhere to stay in the business.

"Safety is a good thing," the small business operator will tell the safety engineer, "but my office force hasn't the time to keep the records you suggest . . . How can I have two men lift those cases when I have only one shipping clerk and everyone else on the production line? . . I know we're having more accidents than we should, but I can't watch my employees all the time and my foreman is too busy with production . . . How can I afford to put point of operation guards on ten kick presses? It would cost me two

months' profits! . . . Sure that would be a safer way to do it, but everyone else in the business does it this way and I can't compete if I slow down operation 30 per cent."

As we see it, there is a real selling job to be done by competent safety engineers.

Mr. Zeskey:



Right now, we are trying to find an answer to this question by means of a questionnaire survey of 500 of our assureds. The re-

sults are not all in yet, but the trend is apparent.

Among the questions we asked were "Did our engineer make any recommendations? If so, do you approve of them?"

Of 314 questionnaires sent out so far, 204 have been returned, 72 of them with unsolicited complimentary remarks about our service. Of the 204 returns, 157 stated that recommendations had been offered, and all but 2 of these stated that the recommendations met with their approval.

It seems to me that some small businesses refuse to accept accident prevention service because the service is not properly offered. But, since most of the concerns do approve of the service, many of them emphatically, we can assume we are generally on the right track and must look now for the defects in our service which are preventing wider acceptance.

I am of the very definite opinion that most successful small business men do know that accidents cost them money and that prevention of them is their responsibility, not the insurance company's. I am equally positive, however, that most of them don't realize how many accidents they have. We run into this situation more frequently, perhaps, than other types of insurance companies since the return we make is based on the assured's own experience.

In most of the cases where our return is low, the assured is surprised at the amount of his losses. This is particularly true when the loss cost is made up of a number



## DON'T LOOSE YOUR HEAD!

Use — Safety Head Control

# No Compressor Destroys Itself Without First Raising Its Own Safety Head

The Automatic Safety Head Control may be applied to any vertical refrigeration compressor that has a safety head. The Safety Control is operated by the lifting of the safety head as a result of broken valve or screw, carbon build-up, loose connecting rod, or a slug of liquid.

Salety Control is operated by the litting of the salety nead as a result of broken valve or screw, carbon build-up, loose connecting rod, or a slug of liquid.

As the salety head lifts, a stainless steel push rod operates a micro-switch which may be connected to the main power control and also through the liquid line solenoid and an alarm system.

anarm system.

Compressors with Safety Head Controls installed are protected against blown out heads. Packing around the push rod is special high temperature and high pressure V-type.

Representatives Wanted

Write for Bulletin

SAFETY HEAD CONTROL CO.

3759 S. Damen Ave.

Chicago 9, Illinois



Do you have a "Pet"

We will immediately design or duplicate any belt in any quantity to your exact needs.

Submit your sketches and specs to:

INDUSTRIAL SAFETY BELT CORPORATION

51 CHATHAM ST. PITTSBURGH, PENNA. JOHNSON SAFETY CLIPPER VISE JAWS ARE AVAILABLE IN SIZES 3 INCH TO 6 INCH



FIBER FACE PROTECTS
DELICATE SURFACES

a must in many machine shops

PRICE PER PAIR

3 in. 1.75,  $3\frac{1}{2}$  in. 1.85, 4 in. 2.00,  $4\frac{1}{2}$  in. 2.15, 5 in. 2.25,  $5\frac{1}{2}$  in. 2.50, 6 in. 2.75.

Order Today

JOHNSON LADDER SHOE CO. EAU CLAIRE, WIS. of minor injuries rather than one or two oustandingly serious ones which are more easily remembered.

MR. WALTERS:

To understand some of the reasons let's analyze a typical statement from the management of a small business operation.



The head of a wholesale fruit and grocery company has to say:

"We'll adopt any ideas which improve the safety and welfare of our employes and assure the best in customer service. However, we have learned that in order to achieve the best in effective accident prevention, we need safety engineering help. We need to know why a particular condition is a hazard, how it will affect our employes and our business. After we understand that a hazard does exist, in most cases we will need the technical answer to the problem.

"One of the basic differences between so-called small and large business is the amount of specialized help employed. In a large business, specialists are responsible for handling one or two phases of the operation. In our business, there are just as many responsibilities, but all of us must be responsible for several areas of operation, instead of certain specific ones. We do not have time to develop a great deal of technical knowledge about accident control."

There are two common reasons why small business does not readily accept accident prevention service:

 Most small businesses are not aware of the hazards which actually exist in their industry.

They do not really understand the indirect effect of accidents on business, and feel satisfied with insurance protection which takes care of the direct cost of the accidents.

Small business demands from the safety engineer that the action taken and the expenditures made relative to accident prevention will show a positive result. The small business manager wants the safety engineering service which takes into consideration his business interests in relationship to the se-



WRITE FOR ILLUSTRATED CATALOG AND PRICE LIST!

factories, clubs, churches and all types of institutions.

space. Your choice of seats . . . with or without backs . . . cast iron frame construction in a variety of colors. "CMF" Sectional tables are standard equipment for schools,

THE CHICAGO HARDWARE FOUNDRY CO.

"Dependable Since 1897"

10101 COMMONWEALTH AVE. NORTH CHICAGO, ILLINOIS

riousness of the accident potential that exists. He wants a progressive program that takes first things first and does not over-emphasize petty

More than anything, he desires practical answers to his problems. Small business is no longer satisfied with a program which deals only with mechanical and physical hazards.

The business may only have one foreman or supervisor, but it is just as important that this one man know the techniques of good supervision as it is for 40 foremen on a larger operation. Small business foremen need help in establishing safe job procedure, teaching employes, following up and directing work activity.

When an insurance safety engineer walks through the door into a small business, he is an employee of that company and he must use the same good judgment expected of any other employe. His first job is to completely erase the feeling of his being an "inspector." He must lay out a positive and effective program which can be understood and carried out by manage-

Once a safety engineer approaches small business with the same attitude that he has toward the safety problems of larger business, he will eliminate the principal reason why the small business does not readily accept accident prevention service.

#### Jack Lift for Heavy Ramp



The problem of lifting a heavy ramp has been solved by Joe Grijalva, superintendent at Stockton plant of Ralston Purina Company. Using two scissor auto jacks, as shown in the accompanying picture, one man can handle a heavy

#### "SAFE" SAFETY SOLVENTS with HIGH Flash Point and LOW Toxicity

#### FO 128 FAST DRYING LIQUID

No residue on drying. To be used for cleaning electrical and mechanical equipment with complete safety to components. ORDER TRIAL cal equipment with complete 30 Gel. Drum at \$1.44 per gel.

#### FO 101 SLOW DRYING LIQUID

Exceptionally safe for spray-cleaning of equipment parts, electric motor stators and rotors and for tank-soaking of metal parts. May be recovered by filtration and re-used.

ORDER TRIAL 30 Gal. Drum et \$1.10 per gal.

Send for INDUSTRIAL MAINTENANCE BULLETIN B2. AVIATION-INDUSTRIAL DIV., Dept. G2.

## FINE ORGANICS Inc.

211 East 19th Street, New York 3, N. Y



#### KEEP SAFETY OUT IN FRONT GET DAV-SON "TELL-ALL" PLANT SAFETY BOARDS

Day-Son Bulletin Boards are especially designed to get the maximum attention for your messages. Day-Son equipped plants everywhere are maintaining envious safety records. Write for circular describing the many style: available.



We are manufacturers of bulle-tin boards for every purpose. Changeable letter directories, production control and sales bulletin boards, cork back boards, and special display boards of

CONSULT US

#### DAV-SON CORK BACK BULLETIN BOARDS For Inside or Outdoor Use

- Wood or Metal Frames Glass Enclosed or Open
- Real Cork Mounting Surface
- Illuminated or Non-Illuminated ny Sizes. Law Cost.



#### DAV-SON

"The Safety Director

Flashing Color, Changeable Letter Display for Timely Safety Messages. The most effective safety bulletin made. Write for special circular.



A.C. DAVENPORT & SON...INC. DESPLAINES ST., CHICAGO 6, ILL.

MANUFACTURERS OF BULLITIN BOARDS FOR EVERY NEED





SAFETY SIGN that will be welcomed by Safety Men! Brady Safety Signs stick to wood, glass, metal, concrete, etc. without moistening. May be applied to any clean surface in a jiffy. No screws, nails, bolts or skilled help necessary. All you do is peel from card, apply where wanted and the sign is up to stay.

Brady Safety Signs are made of durable cotton cloth, Silicone Coated to resist dirt, grime and moisture. CONFORM TO ASA Standard Z35.1-41.

Select your requirements from a complete catalog of standard safety messages. Cost only a few cents per sign. Immediate delivery. Specials made to order.



MANUFACTURERS OF SELF-STICKING PRODUCTS

POW MANUFACTURERS OF SELF-STICKING PRODUCTS

MANUFACTURERS OF SELF-STICKING PRODUCTS

W.H. BRADDY COMPANY

MANUFACTURERS OF SELF-STICKING PRODUCTS

W.H. BRADDY COMPANY

MANUFACTURERS OF SELF-STICKING PRODUCTS

TO SELF-STICK

#### When Your Program Goes Sour

-From page 111

the roof. Remember these things have probably happened many times before but nothing was done about it. There must be a reason or many reasons behind it all.

4. Don't start a deluge of safety meetings.

Preaching at people at this time is not going to do any good. All you can talk about is ancient history anyway. This does not mean that you should not have safety meetings. But, their frequency should be continued on the same basis that they were when your safety program was clicking along with very good results.

5. Don't make rash commit-

Being dramatic about making rash commitments is foolish. Don't use the dramatic table pounding attitude that from now on things are going to be different. Human nature doesn't respond to this approach. Besides, down deep in your heart you know that is only window dressing anyhow. No one is fooled by it.

Also, any rash commitments pertaining to future frequency rates are merely gambles. There are mills that roll along month after month, even year after year, with spotless safety records. But, ask anyone in a position of authority to bet what the accident frequency is going to be the coming month or year and he wouldn't risk a plugged nickel. Human nature is too unpredictable.

So talk about goals. There is a difference between them and rash commitments. But, pointing out goals and how to reach them must be backed by an analysis of past performance to determine causes, so . . .

6. Analyze and review your pro-

It is a good idea to remember at this time that throwing your present program out the window is probably the worst thing you can do. The facts prove that it worked once and should do so again. No matter what type of safety program you have-whether vou use a committee system or not, have a safety man or not, it's well to remember that the ultimate objective is to reach each individual. It must kindle in each individual a burning desire to make safety his own personal responsibility, not only for himself but for his fellow workers. That flame has burned brightly in the past and you will find that it's burning now too, but not as brightly. So, ask yourself these questions to determine the reason:

1. If you are using a safety committee, has it been short circuited? Does it think it's only a rubber stamp?

2. Are we still making efficient use of the help of organized labor? 3. How are our industrial relations?

Are they as good as they were, say a year ago? If not, why not?

4. Has emphasis been focused on

production costs or wastes? 5. Are our bulletin boards spick and span and changed often? Do they carry National Safety Council posters, preferably colored, conveying a clear message?

6. Are we publicizing safety as much as we used to?

7. How about our safety job orders? Are they months old?

8. Are our employees submitting safety suggestions or is there a "what the hell" attitude?

9. How is our sanitation program? Has it slipped? Are we economizing on paint and clean up?

10. How about our plant inspections? Are items needing attention carefully followed up and done?

11. What do our first-aid records show? Are there repeaters? Is a certain type of injury recurring?

12. Are we carefully and promptly investigating and publicizing all accidents, determining the causes and following up on the recommendations?

13. How many new people have we hired and how are we training them?

14. Are the supervisors on the ball? Do they come late to safety meetings or don't show up at all? Are they adopting the attitude, "There are other aspects of my job of more importance. Let someone else take care of the safety job?"

Elaborating on the part supervision plays, someone has aptly said that a good supervisor must be a good juggler. He must juggle balls marked safety, quality, production, costs, industrial relations, etc., and his concentration must be on all of them. Consequently, too much concentration on one will cause him to drop one or more of the others.

And this is what has happened



#### BOMGARDNER First-Aid Stretchers

#### CRUISER STRETCHER

Light weight, strong and compact. Polished aluminum frame with strip aluminum bed. Stationary 2" wheels on one end-legs on other. Folds in middle on automatically locked safety hinges. Leatherette covered mattress and pillow. Body straps included. Length 72"; width 19".

#### 1410 AUXILIARY STRETCHER

Satin finished chrome steel or aluminum frame. Bed of heavy, strongly sewed tan canvas with snap-fastener ends. Hand holes for lifting. Supplied with either automatically locking safety hinges that fold in the middle or with rigid frame. Body straps included. Length 72"; width

Also Ambulance Cots

#### BOMGARDNER MANUFACTURING CO. Cleveland 7. Ohio 1384 Hird Ave. Since 1898





# Increased Safety

Our New Pencil award will float your message and help you write a better safety record.

# For Increased

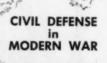
Security

Our New Patented Plastic Seal Badge solves your Plant Protection Problems -it is abso-

lutely Tamper-Proof. Meets all Government Regulations.

Complete Safety Award NS38 Catalog & Prices on Request AWARD INCENTIVES, INC.

200 WILLIAM ST., NEW YORK 38, N. Y.



Answers hundreds of questions on the many aspects of defease against atomic, bacterial, and chemical attack—relis about aircraft, guided missiles, poison gase, incendiary bombs, for tries, comanunities, homes, and individual—rirs, communities, homes, and individual—rirs, communities, homes, and individual—rirs, communities, bomes, and individual—rirs, communities, bomes, and individual—rirs, communities, bright grant processing trace, and local governments. By Augustin M. Prentiss, Brig. Gen 1, U. S. Army (Ret.), 429 pp., 64 illus, \$6.00.

CIVIL DEFENSI

#### SEE THIS BOOK 10 DAYS FREE

McGraw-Hill Book Co., 330 W. 42nd St., NYC 18 Medizar-Hill Bock Co., 339 w. 42nd 31., NYC is Send me Prentias' (1VIL) DFFENSE IN MODERN WAR for 10 days' examination on approval. In 10 days I will send \$6.00, plus few cents for delivery, or return bock postpaid. (We pay delivery if you remit with coupon; same return privilege.) Name ....

City and State ... Company.....

This offer asplies to U. S. only



#### Make your safety lenses last 7 to 15 times longer

Save your lenses with TUF-COTE/ the only true lens protection against weld spatter and grinding wheel pitting. Convince yourself, just send for a free sample TUF-COTE treated lens – give it the works in your own shop, and you will insist on having us treat all the glass safety lenses of your spectacles, goggles and helmets with TUF-COTE.

We grind and treat prescription lenses too. TUF-COTE will leave them optically perfect, even clearer than before. For replacements order Wallace Eyeguard prescription glasses, TUF-COTE treated, List of representatives sent on request.

#### WALLACE OPTICAL COMPANY . INC

1025 Brush Street

Detroit 26, Michigan



when your safety program has gone sour. There has been too much concentration on other things and if we face the situation honestly we must admit that this is so. So called "drives" are not the answer. A drive on this or on that may sound wonderful but experience will show you that a drive on production will cause quality to slip or vice versa. Or, a drive on wastes or costs will cause production or safety to fall by the wayside.

Therefore, smart supervision constantly endeavors to place equal emphasis on all factors that contribute to a smooth running and successful business. When your safety program was clicking wasn't it that way? Attain that same condition again and your safety program will no longer be sour.

Therefore, by analyzing and reviewing your past performance carefully and calmly, you place a spotlight temporarily on one factor that has been neglected. Then, in the light of this appraisal, slowly and methodically remedy it by fixing what has to be fixed.

#### Fire Detection

-From page 166

nite spacing basis. Some makes of these devices are equipped with fixed-temperature elements as auxiliary features.

Another type of automatic fire protection that merits particular mention is automatic smoke detection. First developed for industrial uses by my company fourteen years ago, this service is now extensively used, and in its own particular application is superior to any other system. These devices were originally designed to detect smoke in the ducts of airconditioning systems. They are now considered the ideal protection for record storage rooms, fur vaults, air-conditioning systems and equipment, hops storage vaults and similar enclosed areas where smoke is not ordinarily present.

Projected beam types are the most sensitive. These are systems in which a light-beam is projected across the ceiling or some other part of the protected room.

Spot type and sampling type devices are also available. A sampling or spot type detector is one in which a light-projector and light-receiver are together in a single box, and smoke reaches the box either by convection or through a system of forced suction. Most smoke detectors are electrically supervised so that a distinction may be made between alarms caused by smoke and those caused by equipment troubles.

#### **Automatic Sprinklers**

One of the greatest contributions ever made to fire protection undoubtedly is the automatic sprinkler system. These systems attack a blaze in its early stages by pouring water on the fire when a fusible sprinkler head or plug in a system of water pressure under piping, is melted out by the heat from the blaze itself. Such a sprinkler system is of even greater value when automatically supervised. Such supervision converts the system to an automatic fire detection and alarm system by automatically detecting and re-





Better protection for all the hair cell the time because the full, wide, snood-type back of the new Kennedy "Victory" cap permits complete coverage. Easy to put on. Adjustable to all head sizes. If styles to choose from.

Write Dept. 5 For Complete

### V. E. KENNEDY CO.

MILWAUKEE 16. WISCONSIN

#### LOW COST PROTECTION FOR MAN AND MACHINE

**ELASTICONE** ® GUIDE PIN COVERS

JUST SNAP INTO PLACE

NO TOOLS REQUIRED NO INSTALLATION COSTS

Elasticones are manufactured in stock sizes. Specify O. D. of bushing and full open height of set when ordering.

Pins and Bushings from nicks. scratches . . . prevents injuries to Die Setters & Operfull information.



SAFETY EQUIPMENT COMPANY

2200 E. HUNTINGDON STREET, PHILADELPHIA 25, PA.

# DEN-EL SAFETY hold lamps securely.

Den-El Lamp Guards insure against Jeen-H. Lamp Guards insure against falling lamps, work interruptions, injuries, and material spoilage. Stainless steel for lasting good appearance. Special resilient stock allows them to be sprung aside for quick cleaning or relamping.



For 20 and 40 watt tub



For 100 watt tubes,





For tubes in series



ORDER TODAY THROUGH YOUR REGULAR ELECTRICAL WHOLE-SALER OR WRITE DIRECT FOR ILLUSTRATED LITERATURE, PRO-TECTED BY U. S. PAT. 244,8236.

MANUPACTURED BY DEN-EL EQUIPMENT CO 271 CONKLIN AVENUE, HILLSIDE, NEW JERSEY When you have a Guard Problem-

# Use H & K standardized SAFETY GUARD PARTS

Sturdy - Low Cost - Safe!

Your own maintenance personnel can make any size or shape of Guard for the protection of belts, gears and moving parts from these "UL" approved parts at a saving—no special tools required. Our perforated angles and bands are reinforced at corners with our gussets to make the framework which is covered with sturdy perforated sheets. For floor mounting detachable floor posts and sockets provide easy removal.

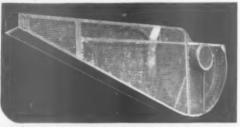
Properly constructed, your guards will prove sturdy, permanent fixtures with smooth surfaces and good visibility and ventilation. They will be readily approved by safety inspectors. Ask for complete information.



H & K Metal strips with slotted perforations especially designed for construction of sturdy punch press quards.

5645 Fillmore St. Chicago 44, III.

114 Liberty St. New York 6, N. Y



Harrington & King

for Safety-plus Style
"Guardi-Ann"



Hat

The hat that meets every requirement of safety engineers and yet completely satisfies the woman-worker's desire for fashionable style-smartness. Has exclusive patented features found in no other hat.

Write for Free Sample or Order Direct from us \$1500 doz.

Styled and Manufactured Exclusively By

CHIC MAID HAT MFG. CO., INC.

630 HIGH STREET

BUFFALO 11, N. Y.

porting any flow of water in the system.

There are four general types of water flow detectors. First: Those in which a flow of water raises the clapper of the alarm check-valve which isolates the sprinkler system from its water supply. This raising of the clapper causes operation of either a mechanical, an electrical or a hydraulic alarm device which is equipped with a retard or time-delay feature to prevent false alarms due to pressure surges or "water hammers."

A second widely used type is a differential pressure operated device which functions whenever a small but sudden decrease takes place in the water pressure within the sprinkler system. Such a decrease occurs whenever one or more sprinkler heads open. This type of device operates very rapidly, since it does not have to wait for the movement of water past a check-valve to cause its operation.

The third type in common use is a vane-type detector, consisting primarily of a movable vane installed in the sprinkler piping. The velocity of water flowing through the pipe causes the vane to deflect and initiate an alarm. This is used in so-called wet-pipe sprinkler systems where either of the preceeding two arrangements are not feasible, or where it is desired to segregate portions of the sprinkler system for annunciation purposes.

The fourth type is designed for use in so-called dry-pipe sprinkler systems. Many sprinkler systems protect unheated areas. In such locations, of course, the pipes cannot contain water because it would freeze. However, when a sprinkler head operates, water under pressure is supplied to the system. This is detected by a pressure-responsive contact-making device. This type of detector is also used in deluge type sprinkler systems which normally have open heads, and in preaction sprinkler systems which flood upon operation of a rate-of-rise or other fire detection

Besides detecting the flow of water, other supervisory features may be added to the sprinkler system. These devices will detect abnormal conditions of the system which might render it inoperative. Supervised points include gate valves, air pressures in gravity and pressure tanks, water levels in gravity and pressure tanks, the temperature of water in exposed gravity tanks, and the like.

Manual fire alarm stations are commonly used to supplement automatic fire detection systems. They may, of course, be installed independently. They provide the occupants of a building with a quick and accurate means of summoning fire-fighting forces directly to the scene. Any manual fire alarm system may be connected to operate local gongs which may be of either a coded or noncoded type. Horns and other sounding devices may be used with any of them too.

Also, it may be pertinent to mention that all good fire detection, smoke detection, manual fire alarm, waterflow alarm and sprinkler supervisory systems listed by Underwriters' Laboratories, Fac-tory Mutual's Engineering Division and the New York City Board of Standards and Appeals, are continuously electrically supervised in such a fashion that derangements of the equipment are automatically detected and reported. Such electrical supervision always distinguishes between equipment troubles and actual alarms.

The rules and regulations commonly in effect throughout the United States in regard to these systems are formulated by the National Fire Protection Association which has a Signaling Committee charged with that duty. These regulations are adapted and published as standard by the American Standard Association, by the National Board of Fire Underwriters' and by the National Fire Protection Association. They have become written into law in some states. These regulations define the various types of alarm systems associated with the detection systems I have mentioned.

#### Central Stations

The most reliable protection system is one that is supervised by an approved central station. Under this system all signals originating in the protected premises are automatically received at an inde**GET THE FACTS!** 

RICH BURN OIL Instant Cooling
RELIEF

for BURNS

All Kinds

HAVE YOU TRIED IT?
Write for sample

CASINO ROOM

39th National
Safety Congress
& Exposition
CHICAGO

OCT. 8-12, 1951

RICH LABORATORIES SALES DIVISION, INC.
Emigsville, Pa.

# "Fire-Chief" Finished

to confine the welding operation to a given area

SALVAGE COVERS

Used to protect machinery, and other equipment from water, dust and snow.



#### FLAMEPROOF CANVAS

impregnated with Hooper's Fire Chief treatment under their patent which carries the Underwriters' Laboratory seal.

A. Smith & Son Inc.

Established Eighteen Hundred Sixty-Seven

MANUFACTURERS OF REEVES STRETCHER

at Green

Philadelphia 23

"If It's Made of Canvas, We Make It"



# Get DRI - RITE Protection

From Your Local Distributor

From Your Local Distributor

For further information contact
THE DRI-RITE COMPANY

(Water, oil and grease absorbents)

100 WEST CHICAGO AVE. CHICAGO 10, ILL.

(In Canada: Safety Supply Co.—Halifax, Montreal, Toronto, Winnipeg, Edmonton, Yancouver)

DIFFERENT TYPES OF
ALL AMERICAN
PUNCH PRESS GUARDS



This 'Point-of-Operation' SAFETY EN-CLOSURE is just one of five different Enclosures available, besides two types of SAFE SWEFPS, the cam action and pivorstot action. That's why we can completely service your press for safety regardless of the kind of equipment.

# " Safety Is Our Business" Send for Literature

Our Engineers will check your Safety Requirements on request

#### All American Safety Equipment Co.

Safety Engineers
Designers — Manufacturers
Discributors
11 SOUTH LA SALLE STREET, CHICAGO 3, ILL.
RA ndolph 6-8481

pendently owned and operated central station located outside of the property, where trained operators and guards are on duty at all times. Upon receipt of alarm signals, the central station acts according to requirements such as dispatching the fire or police department, initiating investigations and securing corrective action, notifying the owners and insurance underwriters, and sometimes the civil authorities. Of equal importance to the handling of alarms, is the continuous electrical supervision of the protective system. Trouble conditions in the system are automatically indicated. A force of skilled maintenance men is constantly available to make repairs and to conduct frequent inspections and tests. This specialized attention is essential to dependable operation.

Central Station Service provides an invaluable adjunct to municipal fire alarm facilities by providing facilities for detection and reporting of fire which are outside of the scope of the municipal system. Such protection does not put any burden on the taxpayer, since the expense usually is the responsibility of the owners or occupants of the protected properties.

#### **Proprietary Systems**

In some locations where, either because the property is very large and has its own fire-fighting or other facilities, or where standard central station service is not available because of distance, proprietary systems are used. Proprietary systems of the Class A type are very much the same as central station systems, except that the central station is actually on the protected property. Class B proprietary systems are not quite so elaborate in respect to equipment and there are modified rules regarding response to signals and the like.

Then there are also local alarm systems designed to give audible or visual signals within the protected premises. They are intended chiefly to warn the occupants of a building that a fire or waterflow has been detected. They are very useful where prompt evacuation of a building is the most important consideration. In instances where central station service is not avail-

able such local systems may be directly connected to a municipal fire department over private lines.

During the past ten years, properties protected by central station-supervised sprinkler supervisory and waterflow alarm service enjoyed an immunity from firelosses of 99.98 per cent.

Complete automatic protection for buildings can be provided in a modern, effective, economical manner by combining automatic fire detection and alarm services with burglar alarm service. The latter may be applied to an entire building or to particular sections and to safes and vaults.

One of the most effective burglar alarm devices is a photoelectric beam of "black light." We call it the Invisible Ray alarm. Based on the principle of the electric eye, this system causes an alarm when a burglar passes through and thus intercepts the invisible beam. Incidentally, this device has proved efficient as a fire detector on many occasions, although it is not intended for that purpose.



ELECTRO-LOCK
SAFETY SHIELD

Another Junkin device that actually ENFORCES safety, because grinder

can't operate until shield is in position. Write today for our new booklet which gives full details of this latest protection against the dangers of grinder operation.



JUNKIN SAFETY APPLIANCE CO., INC.

Smoke from an incipient fire penetrating the photoelectric beam of the burglar alarm system has often given the tipoff in time to prevent serious consequences.

Other automatic services, available in conjunction with fire and burglary protection, include the supervision of automatic heating units and industrial processes. Heating system supervision for coal, oil or gas-fired furnaces maintains a constant check on conditions such as room temperatures, stack temperatures, boiler water levels, pressures and the like. Abnormal conditions are automatically detected and reported to the central station for corrective action.

A similar type of service also is applied to provide a constant automatic check on industrial processes, including drying ovens, steam cookers and various mechanical operations such as paint mixing.

# Elevator Industry Joins To Cut Worker Accidents

To combat increasing shortages of industrial manpower, the nation's elevator manufacturers have inaugurated an accident prevention program designed to reach every plant in the industry.

A safety committee appointed by Commissioner John McArdle of the National Elevator Manufacturing Industry, Inc., New York, will distribute technical and educational bulletins throughout the industry, exchange ideas on safety practices, and compile and distribute accident statistics.

The U. S. Department of Labor, according to Commissioner Mc-Ardle, reports 37.7 disabling injuries per million man-hours in the field of installation or erection of building equipment. This rate, while below the median for the construction industries, is susceptible of improvement.

W. J. Niederauer, safety director of Otis Elevator Co., was appointed chairman. He will be assisted by H. S. Ritter, Westinghouse Electric Corp.; Robert R. Fisher, Watson Elevator Co.; John P. Manning, Haughton Elevator Co., and C. P. Donaldson, J. W. Kiesling & Son.



# Autumn Breezes Coming...

# POISON IVY POISON OAK

For more than a decade IDU Skin Lotion\* has been giving outdoor workers—linemen, utilities workers, gardeners and foresters — the protection they need from poison ivy and poison oak.

These two spring and summertime hezards to health and efficiency will soon become troublesome. Be prepared.

Don't let these irritating conditions develop—use IDU for their prevention. Order Now.

\* Used for More Than 10 years by Wisconsin Public Service. Available at the following prices to public utilities: 4 oz. bottles, \$6.00 a doz.; 8 oz. bottles, \$10.00 a doz.; 1 pint bottles, \$16.00 a doz. FOB Wausau, Wis.

Send us a penny post card for a generous free sample.

I. D. U. PRODUCTS CO. WAUSAU, WIS.



Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

#### Moccasin for Women

Iron Age Division, H. Childs & Co., Inc., Pittsburgh 22, has introduced a new, smartly styled, steel toe safety oxford for women in industry. Designated as Style 605, this shoe is built around a new last, incorporating ideas recently developed to produce a better fitting and more com-



fortable shoe. Made of genuine Goodyear welt, it has supple brown leather uppers. Outsoles are a trademarked brand, tanned and treated for long wear. A low rubber heel contributes to foot comfort. These shoes are available in sizes 4 to 10, widths A to D.

#### Air Grinder

A new air grinder, announced by Ingersoll-Rand Co., 11 Broadway, New York 4, has an added safety device to prevent overspeed operation. It has special application in foundries, steel mills, general manufacturing and metalworking plants where hand grinding is required for snagging, trimming, smoothing, etc. The grinder contains a motor governor to maintain correct wheel speed, plus a built-in unit called the overspeed safety coupling. In case the motor overspeeds, the safety coupling automatically uncouples the arbor and grinding



wheel from the motor, making it impossible to operate the grinder until the cause of overspeeding has been corrected.

Another safety feature is a multiple exhaust system. The operator can choose any one of four exhaust positions, spaced 90 degrees apart, and thus direct the exhaust away from the work and from his own body. Special muffling reduces the

#### **Electrical Tape**

A new type electrical tape, made with Koroseal material, is announced by The B. F. Goodrich Co., Akron, Ohio.

The adhesive is non-transferring, and can be pressed onto a dry surface repeatedly without losing its stickiness. It will not transfer the adhesive from the face or lose its ability to adhere, sticks securely to itself and insulation around copper wire. The tape has a dielectric strength of 8000 volts, is waterproof, highly abrasion resistant and flameproof, resistant to acids, oil alkalies and corrosive salts.

The tape is packaged in a roll 60 feet long, is  $\frac{3}{4}$  inches wide, and .007 inches thick, and in an easy to use and carry metal container.

#### Protective Lighting

Line Material Co., 700 West Michigan St., Milwaukee I, Wis., manufactures a line of protective lighting equipment for use at entrances, parking lots, railway sidings, loading docks, and various types of storage areas. Two luminaires, the Spherolite and Fresnelite, offer a variety of light



patterns which will, in most cases, adequately cover the requirements of all protective lighting installations.

The L-M Spherolite provides IES light patterns, Type I through Type V, and is

designed for use with incandescent lamps up to 575 watts on multiple circuits or 10,000 lumens on series circuits. With no basic changes or additions it will accommodate 11,000, 15,000, or 20,000 lumen vertical position mercury vapor lamps.

The L-M Fresnelite which projects a wide, flat beam of light for considerable distance, was specifically designed for glare lighting of outer fence areas. In application, it is mounted inside the fence boundary and projects a bright beam just outside the fence. As a result, a would-be intruder approaching a fenced area is brilliantly illuminated until he reaches a point 5 or 10 feet from the fence and from there on to the fence he remains silhouetted against a brilliant background.

Control equipment for all sizes and types of protective lighting installations is also available from this company.

#### Face Shield

Industrial Products Co., 2850 N. Fourth St., Philadelphia 33, announces a new type of face shield, scientifically designed for adequate protection and practical use on many industrial procedures such as chipping, grinding, spot welding, etc. Its features are greater area coverage giving pro-



tection to face, head, necks and ears. Cross ventilation minimizes breathing of devitalized air. Broad vision window provides 6" x 9" for unrestricted vision of work. It is light, comfortable and practical for both men and women employees.

#### Germicidal Cleaner

A new liquid germicidal cleaner that cleanses and also deodorizes and disinfects, at the same time is announced by Huntington Laboratories, Inc., Huntington, Ind.

The product, Korex, is a compound combining soap, synthetic detergent, a germicide, a "wetting agent" and penetrant with water softeners and emulsifiers. It is unaffected by water hardness. It is highly

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

concentrated, and diluted up to 40 and 1 with water before using. It has been proved effective on all types of floors such as asphalt tile, cork, linoleum, rubber and on furniture, woodwork, walls, hard goods furnishings, leather, metal and for scrubbing hospital instruments. It is said to be safe on any surface unharmed by water.

rect place. Due to a ball-seated arrangement, the nut will not slip or turn while in use.

After the adjustment has been made, the hinged, perforated, cable guard is closed. The guard may be locked if desired. facturer, this advantage is especially important with "springy" loads where the



The second improvement is the new pins for adjusting the ram connection rod. These are solid pins, and are therefore more satisfactory than the former cotter pins. They are held securely in place by a 2 in. length of coil spring. To make sure that a job setter does not insert both pins from the same side of the rod (which would prevent use of the spring to hold the pins) the holes are capped on alternate sides.

The third improvement is an arrangement for hanging the hand straps on the face of the bolster plate when the operator leaves the press. Upon his return, he is automatically reminded to put on the straps. The hanger, made of spring steel, is so designed that if the press is tripped while the straps are attached to it, the straps will easily pull off, thereby protecting the cord and cable from breakage. Further details may be obtained from the Positive Safety Manufacturing Co., 4411 Perkins Ave., Cleveland 14, Ohio.

#### Hoist-Binder

Safety, convenience and simplicity of operation are stressed in the new Hoist-Binder announced by Colling Hoist Co., 800 Walter St., Danville, Ill. Since this load binder works on the ratchet hoist principle, it will take up or slack off a load chain any amount up to a full 20½ inches, or more if a longer chain is used in the binder. According to the manu-



binding chain or cable must be tightened by force through considerable distance in order to fully secure the load. Also, if a load settles in transit, the new unit is easily tightened without the necessity of releasing the entire load to take a new grab. Full strokes can be used for rapid takeup; half strokes permit minute adjustments. To further speed operation, the binder chain may be pulled freely through the ratchet when not under load.

Another feature claimed for the ratchet and pawl construction is operating simplicity. Binding and slacking off is by means of the handle only, with no buttous or levers to push, no locking device to release. Also with this type of design, the handle will not fly up under load. The handle may be removed to prevent tampering with the load or the binder. When the handle is out, the load cannut be released. Another safety feature is that the handle bends before the binder can be overloaded beyond safe limits. The binder weighs only 10 pounds and will exert a pull of 3,000 pounds, according to the manufacturer.

#### Shock Absorbers for Safety Hats

To provide increased protection from side blows to hard boiled hat wearers' heads, E. D. Bullard Co., 275 Eighth St., San Francisco 3, Calif., is marketing sponge rubber "shock absorbers" that may be attached to hats already in use. The rubber pads are affixed to self-adhering strips and applied by pressing them firmly against the hat crown under the headband.

Advantages claimed for this method of attaching the pads, are that the individual head sizing feature of the safety hat is retained, and standard headband assemblies may be used, thus simplifying replacement problems. The pads are fur-

#### Lift Truck

To suit special applications, the new Load-Mobile electric lift truck manufactured by the Market Forge Co., Everett, Mass., is equipped with a narrow lifting platform. The width of the platform is only 18" and can be furnished in 6", 7", 9" and 11" lowered heights to engage conventional platforms. These trucks have been built as narrow as 15" to meet special conditions.



A set of stabilizing casters are placed on each side of this unit because of the tendency of such a narrow model to tilt in making sharp turns. These casters are spring-mounted and in normal operation completely clear the floor. They are called into action only when the unit tilts, where-upon heavy springs return it to normal position. The truck is battery-operated and features 3-way operating positions which provide safety, comfort and maneuverability. Large capacity cushion rubber wheels with sealed ball-bearings produce the minimum drain on the battery.

#### **Punch Press Device**

Three improvements have recently been made in the Possons Safety Device for punch press operators, assuring additional safety and ease of maintenance. The pullback adjustment, which controls the location of the operator's hands, can now be made while standing on the floor. A single, convenient adjustment takes care of both hands. It consists of a knurled nut on a 10 in. screw, as shown in the illustration. Turning the nut will lower or raise the clip to the pull-back at the cor-



Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

nished in complete sets for field installation on hats in use, or factory installed to order.

#### Bridge Ramp

Roll-Rite Corp., 801 Jefferson St., Oakland, 7, Cal., announces a new bridge ramp designed for easy positioning by a fork truck. A center-positioned lifting stirrup permits one-man handling, balanced control, easy placement. In position, the full range locking device on the ramp prevents "creep." Fork lift tires grip the



rough plate surface grips, even in wet weather.

Beveled edges, rounded corners, side guards are additional improvements and conveniences that provide easy access, guide wheels and protect loads from danger of falling off ramp sides. The ramp reinforced with truss and bottom braces supports loads up to 15,000 pounds.

#### Sound Level Meter

A new Type 410-B Sound Level Meter used for accurately measuring noise, sound, and vibration is announced by Hermon Hosmer Scott, Inc., 385 Putnam Ave., Cambridge 39, Mass. The rugged, compact, and accurate instrument is made possible by use of subminiature tubes and components, together with patents-pending mini-



aturization techniques. The meter meets all specifications of the American Standards Association for sound level meters.

This new model features greater lowfrequency range, electrical circuit improvements, and mechanical design refinements. The saund-level range is from 34 to 140 db above the standard ASA reference level of 0.0002 dynes per square centimeter. Readily obtained hearing-aid batteries have an operating life of about 50 hours. Meter is available with a wide range of optional accessories, including carrying case, extension cables and vibration measuring equipment.

#### Spotlight

A new outdoor spotlight providing 100,000 candlepower with only a 300-watt rating has just been announced by Stonco Electric Products Co., 489 Henry St., Elizabeth 4, N. J. The new unit is designed to concentrate its entire light output in a long-throw, oval-shaped, narrow floodlighting beam that is recommended for area protection lighting of such vulnerable spots as railway sidings, switch and loading areas, shipyards, docks, air terminals and other industrial properties.

Made of non-corrosive, heavy-duty cast aluminum throughout, the Stonco No. 56 spotlight has a universally adjustable castaluminum swivel arm threaded ½" NPT to fit a variety of standard interchangeable



accessories such as flat base, weatherproof junction boxes, wall brackets, wiring troughs, etc. Up to five units can be mounted to a single cluster light assembly so that in anti-sabotage lighting in particular, all lights in a cluster would have to go out before total darkness is possible. All wiring is completely enclosed and the units approved by Underwriters' Laboratories, Inc.

In addition to protective lighting, the unit is recommended for general commercial application in supplementary lighting of gasoline service stations, parking areas, and other localized floodlighting applications.

#### **Plastic Lens**

A new 6-curve plano plastic lens for industrial safety goggles is announced by Willson Products, Inc., Reading, Pa.

Known as Plas-Tough, the new lens is made of a newly developed plastic with an improved surface hardness that has unusual resistance to scratches, abrasions and common industrial acids. One of its features is exceptional light weight, about half that of comparable glass lenses. The lens has been found to be the equal of heat-toughened glass in such important qualities as impact resistance and visible light transmission. On jobs where lens pitting is a factor, this lens will give many times the services of glass, and is also superior to cellulose acetate in this respect. These lenses are available in the popular drop-oval (P3) shape, in 44 and 47 mm. sizes, as well as 50 mm, round.

#### **Fabricated Containers**

The safe handling, storing, and transporting of corrosive liquids and solids is now achieved through the new type of Agilene bottles, jars, and safety jugs fabricated from polyethylene, a thermoplastic material, which in addition to its light weight (specific gravity is 0.92), has the property of chemical inertness to most acids and alkalies. It has the further advantage of being shockproof and non-brittle.

Agilene can be welded by the hot gas welding process, which is extensively used in the manufacture of these containers. All containers are individually tested with air-pressure to guarantee a leak-proof container.

These bottles are available in standard sizes from a quart to five gallons. Storage jars are available in capacities from one quart to five gallons. Agilene safety jugs are of rigid construction and light in weight. The closed top of the jug, with the minor exception of a small air-vent, prevents splashing or spillage. Any escape of liquid is confined to the spout and is restricted by the limited number of outlets from the body of the jug into the spout.

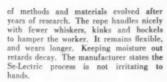
Further information on these products is available from American Agile Corp., Plastic Division, 5806 Hough Ave., Cleveland 3. Ohio.

#### Se-Lectric Rope

South Eastern Cordage, NBC Bldg., Cleveland 14, Ohio, has developed a new manila rope known as Se-Lectric which resists electric shock. The rope "fights off water" and possesses non-conductivity factors which make it specifically suitable for use by linemen, maintenance and other workers who face electrical hazards. Added safety factors also make it practical for many other uses in home, farm, factory, marine and in construction, both indoors and outdoors.

The manufacturing process starts with the individual fibre and yarn which is treated and lubricated by a combination

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.



#### Fire Detector

Employing a new principle of fire de-tection described as "Rate Compensation," Fenwal, Inc., 59 Pleasant St., Ashland, Mass., has just marketed a new model functional design fire detector.

The unit is intended to give protection in such structures as schools, hotels, hospitals, office, public and mercantile buildings, warehouses, and ships. The fixture fits snugly against the ceiling and is mounted in a curved steel case. It can be installed



within new or existing alarm systems, or can be made to actuate an extinguishing

system directly.

Called the Fenwal Detect-A-Fire, the unit gives an alarm precisely at the moment the surrounding air reaches the temperature for which the device is set. For example, if fire warning is desired at 140° F, the unit is pre-set at the factory for this point. The unit will then operate promptly. It is able to "sense" dangerous rises in temperature and to anticipate the point at which it should give the alarm.

The unit employs a stainless steel "sensing" tube which is always in direct contact with the air. Hermetically sealed within the tube are silver electrical contacts. Expansion of the tube with heating of the surrounding air brings the contacts directly together to sound an alarm or to operate extinguishing equipment. Units are available for either normally open or normally closed circuits. Temperature settings up to 325° F may be had. An area as large as 625 square feet can be pro-tected by a single unit. The device carries the approval of the U. S. Coast Guard, and Factory Mutuals Laboratories, and is listed by Underwriters' Laboratories. Inc.

#### Lock Unit

Magline, Inc., Pinconning, Mich., manufacturers of magnesium-handling equipment, have introduced a new drop lock for their line of dock board and ramp combinations. The new lock is incorporated into the ramp section of the unit



and automatically drops into place against the dock, securely holding the unit in position during loading operations. It provides positive lock action, and reduces any possibility of board slippage. The dock board and ramp combinations, complete with the new automatic drop lock, are especially designed units for use in overcoming extreme height differences between dock and car.

#### Jackstacker

A new addition to the Lewis-Shepard line of materials handling equipment is the "Jackstacker" especially made for handling tote bins, tightly sealed containers for bulk materials. The new machine is made in telescopic and non-telescopic models having a capacity for 4000 pound loads up to 48" long. The non-telescopic model has a fork elevation of 53" and the telescopic model has a fork elevation of 77" so that the bins can be easily double-decked in storage areas.



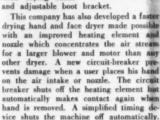
Lifting forks are constructed with an 11" opening to provide ample clearance on each side of the tote bin tilt racks. A special lifting arrangement enables the bins to be tilted on the tilt rack by the Jackstacker in addition to the usual functions associated with this type equipment. Front and rear wheels and stabilizing casters are rubber-tired to provide maximum floor protection. The machine has two speeds forward and reverse, electric lift and lowering, and the spring-set, electrically released brake. All controls are in the handle head and can be operated with the handle in any position.

#### **Drying Machines**

The Chicago Hardware Foundry Co., 3501 Commonwealth Ave., North Chicago, III., announces the new Sani-Dri boot and shoe dryer. Drying is done quickly with a 125 cubic foot per minute air stream heated by a 13.5 amp. element with a 5300 BTU output. The boots are placed on the boot bracket over the metal tubes, drying is finished quickly by the heated air blowing into the boots. Protection to

the machine is provided by a sensitive circuit breaker to protect the heating element from excessive overloading.

The new machine is a portable model with aluminum hammeroid finish that operates either on AC or DC current. A toggle switch. manually operated, controls the ma-chine which comes equipped complete with drying tubes



#### Detergent

A non-irritating soapless detergent, S.S. Spray, designed for emergency use in industrial first aid dispensaries, is announced by Gebauer Chemical Co., 9410 St. Catherine Ave., Cleveland 14, Ohio. Automatically dispensed, the spray is ready for immediate application for quick removal of oil and grease from injuries before the use of antiseptics or other medication. No time or water is needed to develop a lather. Ejection from the bottle eliminates waste, since the automatic level allows better control of the amount desired. It may also be used for the removal of ointment dressings and as a detergent for soap-sensitive skins.



Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

#### Floor Cleaner

"Emerel," a new floor cleaner and deodorizer, is announced by S. C. Johnson & Son, Inc., Racine, Wis.

Emerel is safe for all types of floors and can be used to clean washable walls and woodwork. It loosens dirt, grime and floor stains without scrubbing, yet contains no harsh chemicals, abrasives, free alkali, or harmful acids. Formulated as a concentrate, it is mixed in a ratio of 1 to 20 and may be used with either hot or cold water. Spread on the floor and gently agitated, it loosens films and stains quickly. It also deodorizes. The new product was especially formulated to eliminate the scrubbing formerly needed to clean terf razzo, marble, ceramic tile and vitreous tile found in corridors and lobbies. It may also be used to clean rubber and asphalt tile, lineleum and wood, new types of plastic flooring as well as other washable surfaces. Emerel is available in 1-gallon and 5-gallon cans and 55-gallon drums.

Angeles district office, while continuing to handle the oil field accounts. He served in this dual capacity until his recent ap-

Frederick B. Hermann, assistant director

of the Technical Development Department of The Diversey Corp., 1820 Roscoe St., Chicago, since shortly after the beginning of the year, has been named director, it has been announced by President L. Shere, Mr. Hermann succeeds R. J. Stell,



recently named assistant to Diversey's general sales manager.

President Shere also announced the appointment of Donald V. Hannibal as as-

sistant director of the department. Mr. Hannibal previously headed analytical technical service and control for the chemical laboratory, a division of the Diversey Research Laboratories. He is a graduate of the University of Chicago in chemistry.

joined Diversey in 1947 as an engineer in the Technical Development Department,

#### **News Items**

John A. Roebling's Sons Co., Trenton, N. J. announce the following appointments:

John P. Kadlic as Philadelphia district sales manager for

the wire rope division. Mr. Kadlic replaces Vincent L. Daulton, who lost his life in a recent train wreck. A native of Bellair, Ohio. Mr. Kadlic is a graduate of Princeton University. Prior to assuming his new duties, he was the



company's sales representative in the St. Louis area.

James C. Barney has been appointed assistant manager of sales for the wire rope division of John A. Roebling's Sons Co. His new headquarters are at the

firm's home office in Trenton. He replaces the late George B. Stoess



sales representative. In 1947 he was promoted to assistant manager of the Los

T. G. Meulenberg, president of Automotive Rubber Co., Inc. of Detroit, announces the appointment of R. A. Lees as new general plant manager with complete responsibility for operation of the company's new rubber mill and all processing departments. Mr. Lees brings with him an extensive background in the rubber busi-

ness. For 22 years he has been closely identified with the Anode process of rubber dipping. Born in Ohio, he received his degree from Oberlin College where he was later appointed to a teaching fellowship. His first connection with the rubber



industry was as a research chemist in Akron. He served as special consultant to the Rubber Bureau of WPB during the war and more recently to the Rubber Division of NPA

#### **Health Council Meets** Plans More Active Program

More cooperative thinking between the medical sciences and other fields - particularly engineering and education—is vital to the conservation of human resources, Dr. Detlev W. Bronk, president, Johns Hopkins University, told those in attendance at the 31st Annual Meeting of the National Health Council in New York City, recently.

Chief speaker at a dinner session of Council member agency delegates and their guests, Dr. Bronk, who is also president of the National Academy of Sciences, said:

"The very fact that medical discoveries make possible new cures for diseases, new ways of preventing disease, new surgical and diagnostic procedures, raises new economic problems which must be solved if these great medical discoveries are not to be tarnished by our inability to solve the socialeconomic problems which are thus created.

"The mere conservation of physical resources is not enough to satisfy men and women. . . . Curiosity and intellectual ability are among the most valuable assets of our national resources."

Fear of the future, fear of the uses to which our mounting knowledge might be put, he warned, is sapping the confidence and courage of the American people.

Civil defense plans of various government agencies and voluntary and professional organizations were discussed at a symposium on "Mobilization for Health Security-A Challenge to the Voluntary Health Agencies."

At a business session, the joint planning and action which constitute the Council's program was discussed. Closer relations with other agencies and coordinating bodies in fields akin to health, it was agreed are essential.

#### TRADE PUBLICATIONS

## in the Safety Field

These trade publications will help you to keep up-to-the-minute on new products and developments in industrial health and safety equipment. They are free and will be sent by manufacturers without obligation to readers of NATIONAL SAFETY NEWS who are responsible for this work. Send in the coupon below checked for the publications you desire. Please make your requests promptly.



- Standard Signs: Folder illustrating line of standard utility and industrial metal safety, caution, and directional signs. Also warning flags. Eastern Metal of Elmira, Inc.
- Air Grinder: Folder describing the new hand air grinder which incorporates an overspeed safety coupling, designed to protect the operator and those about him by keeping wheel speeds within safe operating limits, regardless of the motor speed. Ingersoll-Rand.
- 3. "Plastic Rock": New 8-page brochure on plastic rock flooring. Contains a combination of information on how and where to apply plastic rock flooring as well as certain data about the product itself. Typical flooring applications are illustrated, showing how new life can be given old floors. United Laboratories, Inc.
- 4. Safety Shoes: Catalog illustrating various types of safety shoes for workers in industry. Features anchor flange steel box toe providing dependable protection. Also shoes built to meet the needs of workers in mines, quarries, oil fields, and for protection against explosive gas fume hazards. International Shoe Company.
- 5. "Plibrico Incinerators": New 16-page catalog covering the complete Plibrico rubbish incinerator line, erected in four standard sizes rated at 500 to 3500 lbs. per hr.; also portable incinerator which comes in four sizes. Also described are special incinerators for garbage and cafeteria refuse, biological and pathological material, wood refuse and special applications. Plibrico Jointless Firebrick Co.
- 6. "Facts About Floor Safety": A 20-page booklet describes in detail the recommended finishing techniques and routine maintenance methods for asphalt and rubber tile, linoleum, wood, concrete and terrazzo flooring. A special section lists the danger points important from a safety angle in the maintaining of various types

- of floors. Also many practical floor care hints about cleaning, polishing, touchingup and refinishing as a guide to safe floor surfaces. S. C. Johnson & Son, Inc.
- 7. "Sani-Dri": Brochure on the new Sani-Dri high speed eldetric hand and hair dryers. This drying service is suitable for schools, office buildings, hospitals and industrial washrooms of all types. Comes in three models to accommodate these various facilities, with complete specifications. The Chicago Hardware Foundry Co.
- 8. "Elasticone Guide Pin Covers": A new technical data sheet, detailing sizes and material widths of Elasticone Guide Pin Covers, the spirally wound spring of flat steel that protects leader pins and bushings against nicks and scratches. This sheet, which has been designed as a handy file card, includes complete specifications and stock numbers of Elasticones. Central Safety Equipment Company.
- 9. "Safety Signs": Folder describing the Brady Self-Sticking Safety Signs. These signs come in a large variety of safety messages on standard color backgrounds. They stick to any clean dry surface without moistening and can be used on windows, doors, walls and machinery. W. H. Brady Company.
- 10. "Monorock": 4-page bulletin on special long-wearing cement floor finish adaptable to a broad range of commercial and industrial floor locations. Product includes a mixture of tough special aggregate which strengthens the concrete slab surface. Cast on dry, it penetrates, interlocks and becomes an integral part of the monolithic slab. General Floor Company.
- 11. "Rockwood T-Head": Brochure on the T-Head sprinkler for use in fixed piping systems. Head has a directional wide angle, medium velocity discharge and is installed in a pendent position. It is recommended for automatic as well as open deluge use

- wherever sprinkler systems are used. Rockwood Sprinkler Co.
- 12. "Automatic Coupler": Folder on the new Ryd-In Automatic Coupler, designed to keep gang motor cars and trailers in true alignment in case of derailment. Also adaptable for spacing and interchangeable operations. Rydin Railway Equipment Co.
- 13. "Micro Tips": Periodic news sheet featuring production ideas. Full of practical ideas for making present switch equipment more automatic and for protecting equipment, products and personnel by use of Micro products. Micro Switch.
- 14. Wire Glass: Catalog No. 51 on the many uses of wire-glass for protection in windows, doors, transoms, skylights, fire escapes, partitions, exterior walls and other places where fire or breakage protection is required. Mississippi Glass Company.
- 15. "How to Make Your Material Handling Pay Dividends": Booklet on automatic elactric trucks for use in lifting, stacking and moving heavy materials. Features a wide range of models suitable for all industrial needs. Automatic Electric Trucks.
- 16. Anchor Fence: Catalog featuring line of chain link fences designed for protecting plants and grounds against trespassers and troublemakers. Also for controlling tradic in and out of the plant, and safeguarding outdoor stocks. Anchor Post Products, Inc.
- 17. "Sling Data Book": Tells all about Flatweave slings and the rest of Roebling's line of slings and sling accessories for every hoisting, loading and moving operation. John A. Roebling's Sons Company.
- 18. Loading Platform: New catalog on the operation and maintenance of the Leva-Dock hinged-ramp for loading and unloading all types of trucks and trailers. Hydraulically operated, it adjusts itself to desired positions. Rotary Lift Company.

#### 

#### Page No.

## Advertiser's Index

	Page No.
Acme Protection Equip. Co	190
Advance Glove Mfg, Co. Aetne Casualty and Surety Co. Alan Wood Steel Co.	173
Aetna Casualty and Surety Co	128
Alan Wood Steel Co.	161
All American Salaby Equipment Co	204
American Abrasive Metals Co	44
American Abrasive Metals Co American Chain & Cable Co., Inc. American Industrial Safety Equip.	132-147
American Industrial Safety Equip. American-LaFrence-Foemite Corp. American Optical Co.	Co192
American-LaFrance-Foamite Corp.	37
American Optical Co.	Z6-Z7-B.C.
American Tel. & Tel. Co. Ampco Metel, Inc.	149
Annul Chamical Co.	136
Award Incentives Bailey, William M., Co. Bashlin, W. M., Co. Bausch & Lomb Optical Co.	199
Bailey, William M., Co.	131
Bashlin, W. M., Co	64
Bausch & Lomb Optical Co	54-86
	165
Beryllium Corp. Blaw-Knox Co. Bomgardner Mfg. Co.	169
Blaw-Knox Co.	170
Bomgardner Mfg. Co.	199
Bradley Washfountain Co. Brady, W. H., Co.	77
Brady, W. H., Co	198-205
Buffalo Sine Appliance Coop	145
Rubeke P H Co	79
Buffalo Fire Appliance Corp. Buhrke, R. H., Co. Bullard, E. D., Co.	53
Cambridge Rubber Co.	137
	1.40
Cantral Safety Equip. Co. Chemical Service of Baltimore Chemical Specialties, Inc. Chesebrough Mfg. Co. Chic Maid Hat Mfg. Co., Inc. Chicage For Shiald	201
Chemical Service of Baltimore	61
Chemical Specialties, Inc	79
Chesebrough Mfg. Co.	167
Chic Maid Hat Mfg. Co., Inc.	202
Cincado Eye Shield Co	- Land a North
Chicago Hardware Foundry Co.	150-176
Columbus-McKinnon Chain Corp. Consolidated Laboratories, Inc. Coppus Engineering Corp.	167
Connus Engineering Corn	83
Corbin Cabinet Lock Division,	
American Hardware Corp.	173
Cornell Film Co.	156
	11
C-O-Two Fire Equipment Co. Cover, H. S. Cunningham, M. E., Co. Davenport, A. C., & Son, Inc. David's Gloves, Inc. Davis Emergency Equip Co., Inc.	121
Cunningham, M. E., Co.	76
Davenport, A. C., & Son, Inc.	197
David's Gloves, Inc.	166
Davis Emergency Equip Co., Inc.	59
Dayton Safety Ladder Co.	201
Den-El Equip. Co. Detex Watchclock Corp.	79
Diamond Match Co.	
Diversey Corp.	162
Diversey Corp. Dockson Corporation	
Dow-Corning Corp.	
Dri-Rite Co.	204
Dukane Corp.	177
Dunn Products	175
Dura-Tred Co.	144
Durable Mat Co. Eagle-Picher Sales Co.	193
Fastern Metal of Elmina Inc.	142
Eastern Metal of Elmira, Inc. Eclipse Fuel Engineering Co. Electric Cord Co.	185
Electric Cord Co.	171
Ellwood Safety Appliance Co.	176-184
Emerson, J. H., Co.	78
Employers Mutuals of Wausau	163
Employers Mutuals of Wausau Exposition Guide	to 8 Inc.
Fendall Co.	72
Fenwel, Inc.	119
Fine Organics, Inc.	197
Finnell Systems, Inc.	57
Franklin Research Co	178
Foam-x Co. Franklin Research Co. Frost Paint & Oil Corp.	168
Glendale Optical Co.	172
Gro-Cord Rubber Co.	52
Heas Corp.	188
Harrington & King Perforating Co.	202
Hild Floor Machine Co.	70

	Page No.
Hillyard Sales Co.	67
Holcomb Safety Garment Co.	168
Hollingshead, R. M., Corp. Hood Rubber Co.	
Huntington Laboratories Inc.	174
Hygiene Research, Inc.	194
Hygiene Research, Inc. Hynson, Wescott & Dunning, Inc. Hy-Test Div., International Shoe	125
Hy-Test Div., International Shoe	Co. 22-23
	ZUS
Industrial Gloves Co. Industrial Products Co.	
Industrial Safety Belt Corp.	198
Inland Steel Co.	139
Inland Steel Co. International Surgical Splints Cor	p. 190
Iron Age Div., H. Childs & Co.,	Inc 47
Johnson Ladder Shoe Co. Jones, C. Walker, Co. Junkin Safety Appliance Co. Justrite Mfg. Co. Kelley-Mahorney Co.	196
Jones, C. Walker, Co.	183
Junkin Safety Appliance Co.	86-204-212
Kelley Maharney Co.	180
Kennedy V F Co	201
Keystone View Co.	86
Kelley-Mahorney Co. Kennedy, V. E., Co. Keystone View Co. Kidde, Walter, & Co., Inc. Kimball Safety Products Co. Kinnear Mfg. Co. Klear-Ve Products Co Inc. Klear-Ve Products Co Inc.	135
Kimbell Safety Products Co.	48
Kinnear Mg. Co. Klear-Vu Products Co., Inc. Klein, Mathias, & Sons Laughlin, Thomas, Co. Legge, Walter G., Co., Inc. Lehigh Safety Shoe Co. Littall E. J. Machine Co.	160
Klear-Vu Products Co., Inc.	155
Klein, Mathias, & Sons	
Laughlin, Thomas, Co.	140
Legge, Walter G., Co., Inc.	30.31
Tittell F I Machine Co.	195
Littell, F. J., Machine Co. Louisville Metal Products Co.	73
Macwhyte Company	37-33
Magline Inc.	200
14	
Marsh & McLennan, Inc.	8
Masury-Young Company	
McAn, Thom, Safety Shoe Div.	43
Marsh & McLennan, Inc. Masury-Young Company McAn, Thom, Safety Shoe Div. McDonald, B. F., Co. McGraw-Hill Book Co., Inc.	29-25
McKay Company	123
McKey Company Medical Supply Company	143
Melflex Products Co.	164
Merrill Brothers	187
Miller Equipment Co., Inc. Miller Products Co., Inc. Mine Safety Appliances Co.	71
Miller Products Co., Inc.	184
Mine Safety Appliances Co.	1.F.C35
Minnesota Mining & Mfg. Co.	146
Mione Mfg. Co.	126
Multi-Clean Products, Inc. National Foam System, Inc. National Safe-Line Clemp Co. National Safety Council	133
National Safe-Line Clamp Co.	120
National Safety Council 1  Oakite Products, Inc. Oil-Dri Corp. of America Onox, Inc. Osborn Mfg. Co. Pac-Kit Company	80-181-182
Oakite Products, Inc.	185
Oil-Dri Corp. of America	81
Onox, Inc.	186
Osborn Mfg. Co. Pac-Kit Company Packwood, G. H., Mfg. Co. Patent Scaffolding Co., Inc. Pennsylvania Optical Co.	178
Pac-Kit Company	62
Packwood, G. H., Mfg. Co.	50
Panerylyania Ontical Co.	20-21
Positive Safety Mfo Co.	127
Protectoseal Co. The	69
Positive Safety Mfg. Co. Protectoseal Co., The Pulmosan Safety Equip. Corp.	69
Ready Made Signs	164
Record Industrial Co.	151
Reece Wooden Sole Shoe Co. Rich Laboratories Sales Divn., Inc. Rockwood Sprinkles Co.	77
Rich Laboratories Sales Divn., Inc.	203
Rockwood Sprinkler Co.	45
Safaty Boy Too Co	116 117
Safety Clothing & Fouriement Co	
Safety First Products Co	39
	75
Safety First Supply Co.	75
ROCKWOOD SPIRINIER CO. ROSE MFG. CO. Safety Box Toe Co. Safety Clothing & Equipment Cc Safety First Products Co. Safety First Supply Co. Safety Head Control Co.	75 122 195
Safety First Supply Co. Safety Head Control Co. Safety Heel Corp.	75 122 195 194
Safety First Supply Co. Safety Head Control Co. Safety Heel Corp. Salisbury, W. H., & Co.	75 122 195 194 72
Safety First Supply Co. Safety Head Control Co. Safety Heel Corp. Salisbury, W. H., & Co. Sawyer, H. M., & Son, Co. Schrader's, A., Son	75 122 195 194 72 124 55

Scott Aviation Corp.	41
Sellstrom Mfg. Co.	188
Shoemaker, Frank O.	176
Sigme Engineering Co.	
Silicone Paper Co. of America	138
	118
Smith, A., & Son, Inc.	
Southern Mfg. Co.	183
Spencer Turbine Co.	
Standard Industrial Products Co.	177
Standard Safety Equipment Co	
Standard Signs, Inc.	
Steel Scaffolding Co., Inc.	
Stepan Chemical Co.	
Stonehouse Signs, Inc.	
Surety Rubber Co.	
Taylor, S. G., Chain Co.	68
Tennant, G. H., Co.	40
Tracerlab, Inc.	130
Trumbull Mfg. Co.	170
Union Wire Rope Corp.	
U. S. Hoffman Machinery Corp.	
U. S. Rubber Co.	
U. S. Safety Service Co.	10.10
U. S. Steel Corp.	124
U. S. Treasury Dept.	
Universal Vice & Tool Co.	150
Vonnegut Hardware Co.	
Wallace Optical Co.	200
Optical Co., Inc	15-16-17
West Disinfecting Co.	
Wheeler Protective Apparel, Inc.	46
Wiesman Mfg. Co.	
Wilkins, The, Co., Inc.	
Williams, Don E., Co.	
Williams Jewelry & Mfg. Co.	175
Willson Products, Inc.	9-10
Wolf, Harry J., Shoe Co.	
Worklon, Inc.	
Tryingin, Illes	121



guards for presses are helping thousands of enthusiastic users set new safety records . . higher production schedules. JUNKIN guards operate automatically from foot pedal, fall by gravity to bolster plate. Press can't operate until guard is in position.

Write for this New Bulletin

Junkin Safety Appliance Co., Inc. 316 W. Hill Street Louisville, Kentucky



JUNKIN SAFETY

# Check Your Needs on this ...

# CESCO

#### SAFETY EQUIPMENT INDEX

#### **APRONS** Re-Flecto-Ray Smoke-Green GUARDS Grinder ☐ Acitex ☐ Super Safety Toe ☐ Plastic RESPIRATORS HELMETS ☐ Air-Fed GOGGLES ☐ Air-Fed☐ "Hat-n-Dust ☐ Acid "Hat-n-Shield" ☐ Fume Cases ☐ Welders ☐ Chemical SHIELDS HOODS ☐ Face Chippers ☐ Hand ☐ Coverlite Acid ☐ "Hat-n-Shield" ☐ Observation Air-Fed ☐ Cup-type ☐ Dust □ Babbitting Flash ☐ Dust ☐ Spark ☐ Welders ☐ Wire Screen "Hat-n-Gogs" ☐ Paint Spray Headgear-Type LENSES Painters SLEEVES ☐ Plastic Anti-Glare ☐ Acitex ☐ Prescription Bi-Color **SPECTACLES** Blue, Aluminum ☐ Spec-Lite ☐ Spectacle-Type Blue, Melters Clip-On ☐ Speed-Shift Cescoweld ☐ Comfort-Bridge Spot Welders Clear Cover Plastic ☐ Side-Shield Type ☐ Welders Essentialite Perma-Clear ☐ Wide Vision ☐ Smelters ☐ Wire Screen Pit-Proof Cover ☐ Welders

#### WHERE YOU CAN BUY IT

ATLANTA, GA.
Guardian Safety Equipment Co.
427½ Moreland Avenue, N. E.

427½ Moreland Avenue, N. E. BIRMINGHAM, ALA. Guardian Safety Equipment Co. 4215 1st Ave. No.

BOSTON, MASS. General Equipment Corporation 261 Franklin Street

BUFFALO, N. Y. The Watson Company 1443 Main Street

CHICAGO, ILL. Universal Safety Equipment Co. 5115 Diversey

CINCINNATI, OHIO Williams & Co., Inc. 3231 Fredonia Avenue CLEVELAND, OHIO

Williams & Co., Inc. 3700 Perkins Avenue COLUMBUS, OHIO Williams & Co., Inc. 851 Williams Avenue

DETROIT, MICH.
Averill Equipment Company
19225 Conant Avenue

EAST ORANGE, N. J. Guardian Safety Equipment Co. 491 Prospect Street

HOUSTON, TEXAS
Guardian Safety Equipment Co.

1915 A Westheimer KANSAS CITY, MO. Safety, Incorporated 171/2 E. 31st Street

KNOXVILLE, TENN.
Safety Equipment Distributing Co.
832 W. Main Street
LOS ANGELES, CALIF.

Guardian Safety Equipment Co. 6104 S. Main Street MILWAUKEE, WIS.

MILWAUKEE, WIS.
Universal Safety Equipment Co.
3155 S. 7th Street

PEORIA, ILL.
Universal Safety Equipment Co.
1710 Main Street

PHILADELPHIA, PA.
Guardian Safety Equipment Co.
214 S. 45th Street

PITTSBURGH, PA.
Williams & Co., Inc.
901 Pennsylvania Avenue

ST. LOUIS, MO. Safety, Inc. 2608 Olive Street

ST. PAUL, MINN.
Continental Safety Equipment, Inc.
1551 Selby Ave.

1551 Selby Ave.

SALT LAKE CITY, UTAH

Universal Fire & Safety

Equipment Co., Box 1587

SAN FRANCISCO, CALIF.
Guardian Safety Equipment Co.
50 Hawthorne Street

SPOKANE, WASH.
Spokane Safety Appliances
P. O. Box 8055
TOLEDO, OHIO

Williams & Co., Inc. 650 E. Woodruff Avenue TULSA. OKLA.

Guardian Safety Equipment Co. 1742 S. Main Street MEXICO CITY, D. F. Safety Equipment S. A. Paso de la Reforma 1-856

MONTREAL, QUEBEC
The Butler Optical Company, Ltd.
1520 Mountain Street







CESCO

SEE OUR EXHIBIT - BOOTHS 72-73-74

# For Workers Who Need a LIGHTWEIGHT, STRONG, DURABLE, GOOD LOOKING

Acetate Goggle...



# the AO F9200 is the Buy!

The AO F9200 Ful-Vue affords the highest quality eye protection against flying particles coming from the front, and is available with side shields when foreign objects endanger from the side. While used throughout industry in machine and hand tool work, chipping, grinding, riveting, bottling and welding with the recommended Calobar lenses, the goggle fills a particular need in chemical and electrical plants and other operations where sparks are fire and explosion hazards. Your nearest AO Safety Products Representative can supply you.

Remember whether the hazard is particles from the work, glare, heat, ultraviolet or infrared, cinders, dust or wind there is an AO Goggle that meets the need.



Safety

Goggles

- Hinges and temples out of line of sight, for unobstructed side vision.
- Face formed keyhole bridge for extra protection and comfort.
- Lenses conform to and cover eye orbit for safety, better vision, appearance.
- Nose pads designed to hold goggle firmly and comfortably. FOR ADJUST-ABLE PADS FOR HARD-TO-FIT WORKERS ASK FOR NEW AO FX9200 goggle.
- Available with comfort cable or skull temples. Former have metal core; are enclosed and sealed. Skull temples have extra strong wire core encased in acetate.
- Side shields are perforated acetate to help keep lenses fog-free.
- Calobar lenses in medium, dark or extra dark shades . . . ground to the worker's own prescription

American Optical